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# CATALOGUE

OF THE

# FISHES OF NEW SOUTH WALES,

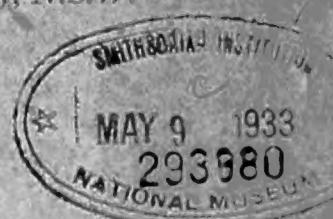
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WITH

## THEIR PRINCIPAL SYNONYMS.

BY

J. DOUGLAS-OGILBY,

*Assistant Zoologist, Australian Museum, Sydney, N.S.W.*



SYDNEY: THOMAS RICHARDS, GOVERNMENT PRINTER.

1886.



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With the author's Compliments

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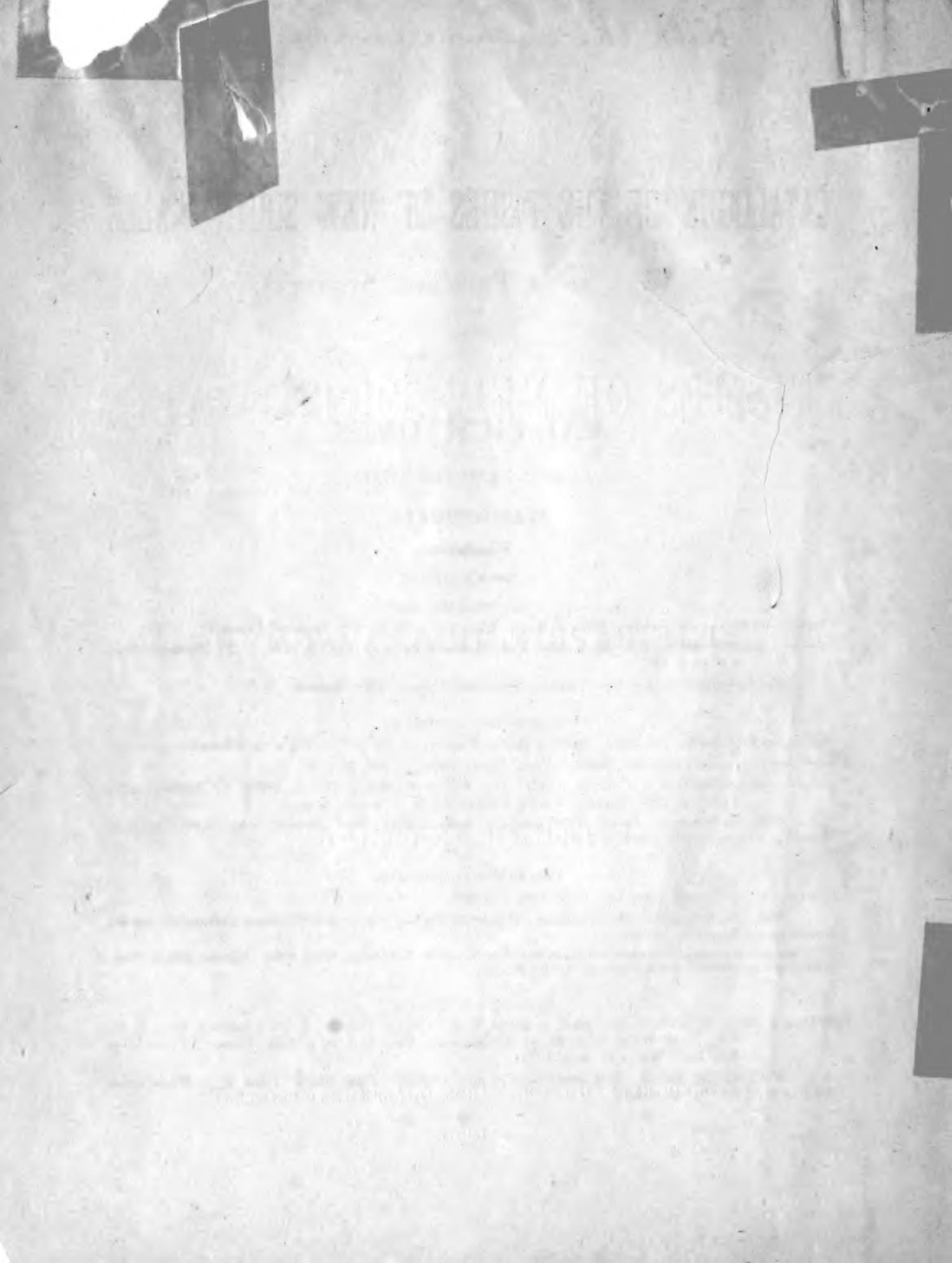
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# CATALOGUE OF THE FISHES OF NEW SOUTH WALES,

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## PALÆICHTHYES.

### CHONDROPTERYGII.

#### PLAGIOSTOMATA.

##### Selachoidei.

##### CARCHARIIDÆ.

###### / CARCHARIAS MACLOTI.

*Carcharias (Hypoprion) macloti*, Müll. & Henle, Plagiost., p. 34, pl. 10; Duméril, Elasmobr., p. 350.  
— *macloti*, Günth., Cat. viii, p. 362; Day, Fishes of India, p. 713, pl. 188, f. 2; Macleay, Aust. Cat. ii, p. 287.

*Hab.*—Indian Ocean; New Guinea; Australian Coasts; Port Jackson.

###### CARCHARIAS GANGETICUS.

*Carcharias (Prionodon) gangeticus*, Müll. & Henle, Plagiost., p. 39, pl. 13; Duméril, Elasmobr., p. 359.  
— (—) *japonicus*, Schleg., Faun. Japon. Poiss., p. 302, pl. 133.  
— *gangeticus*, Günth., Cat. viii, p. 367; Day, Fishes of India, p. 715, pl. 187, f. 1; Macleay, Aust. Cat. ii, p. 288; Tenison-Woods, Fisheries of N. S. Wales, p. 93.

*Hab.*—Indian Seas; Japan; Fiji Islands, in fresh waters; Port Jackson. *Sea Shark* (Tenison-Woods.) Grows to the length of 7 feet.

###### CARCHARIAS BRACHYURUS.

Günth., Cat. viii, p. 369; Macleay, Aust. Cat. ii, p. 288.

*Hab.*—New Zealand; Port Jackson. *Whaler*, at Sydney, where it is the most common *Carcharias*. Grows to the length of 12 feet.

*Carcharias glaucus* is included by Tenison-Woods in his list of New South Wales fishes (Fisheries of N. S. Wales p. 25), but I am unable to find any authority for the statement.

###### GALEOCERDO RAYNERI.

M'Don. & Barr., Proc. Zool. Soc. 1868, p. 368, pl. 32; Günth., Cat. viii, p. 377; Ramsay, Proc. Linn. Soc. N. S. Wales v, p. 95, pl. 4; Macleay, Aust. Cat. ii, p. 289; Haswell, Proc. Linn. Soc. N. S. Wales vii, p. 210.

*Hab.*—Indian Seas to Port Jackson; Solomon Islands. *Tiger Shark* of the N. S. Wales coast. Attains to 12 feet in our waters.

## GALEUS AUSTRALIS.

*Galeus australis*, Macleay, Aust. Cat. ii, p. 270; McCoy, Prodr. Zool. Vict. dec. vii, pl. 64, f. 2; Tenison-Woods, Fisheries of N. S. Wales, p. 92.

*Hab.*—Coasts of S. E. Australia and Tasmania; Port Jackson; *School Shark* of Sydney. Grows to the length of 6 feet at least.

## ZYGENA LEEUWINI.

*Zygæna lewini*, Griff., Anim. Kingd. x, p. 640, pl. 50; Rochebrune, Act. Soc. L. Bord. vi, p. 56.

*Cestracion leeuwinii*, Duméril, Elasmobr., p. 383.

? *Zygæna malleus*, Macleay, Aust. Cat. ii, p. 291; McCoy, Prod. Zool. Vict. vi, pl. 56, f. 1.

*Hab.*—Australian Seas; Richmond River; Port Jackson. *Hammer-head* of our coasts. The Australian Museum possesses a mounted specimen of a female which measures over 15 feet; it was killed at the mouth of the Richmond River during the spring of 1884, and no less than thirty-nine living young were taken from it; twelve of these, forwarded to the Museum, averaged 20 inches each.

## MUSTELUS ANTARCTICUS.

Günth., Cat. viii, p. 387; Macleay, Aust. Cat. ii, p. 292; Parker, Trans. N. Z. Inst. xv, p. 219, pl. 30; Casteln., Proc. Zool. Soc. Vict. i, p. 216.

*Hab.*—S. Pacific; Port Jackson; Port Phillip; Tasmania; New Zealand. *Hound* of our coasts, where it is common. Attains the length of 5 feet.

## LAMNIIDÆ.

## LAMNA GLAUCÆ.

*Oxyrhina glauca*, Müll. & Henle, Plagiost., p. 69, pl. 29; Schleg., Faun. Japon. Poiss., p. 302; Duméril, Elasmobr., p. 409.

*Lamna glauca*, Günth., Cat. viii, p. 391; Macleay, Aust. Cat. ii, p. 292; Tenison-Woods, Fisheries of N. S. Wales, p. 95.

*Hab.*—Japan; Cape seas; Australian coasts. *Blue Pointer* of Port Jackson. Grows to the length of 12 feet.

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## CARCHARODON RONDELETII.

Müll. & Henle, Plagiost., p. 70; Duméril, Elasmobr., p. 411; Günth., Cat. viii, p. 392; Macleay, Aust. Cat. ii, p. 294; Haswell, Proc. Linn. Soc. N. S. Wales ix, p. 83, pl. 1, ff. 1-4; Günth., Study of Fishes, p. 320, f. 114 (tooth).

*Carcharodon capensis*, Smith, Ill. Zool. S. Afr. Pisc., pl. 4.

*Hab.*—Mediterranean; Cape seas; Australian seas. *White Pointer* of Port Jackson. A fierce and destructive species, which attains the length of 40 feet.

## ODONTASPIS AMERICANUS.

*Squalus americanus*, Mitch., Phil. et Lit. Trans. New York i, p. 483.

*Odontaspis taurus* (Rafin.), Müll. & Henle, Plagiost., p. 73, pl. 30; Duméril, Elasmobr., p. 417; McCoy, Prodr. Zool. Vict. dec. vii, pl. 64, f. 1.

— *americanus*, Abbott, Proc. Ac. Nat. Sc. Philad. 1861, p. 399; Duméril, l.c., p. 419; Günth., Cat. viii, p. 392; Macleay, Aust. Cat. ii, p. 294; Tenison-Woods, Fisheries of N. S. Wales, p. 95.

*Hab.*—Atlantic; Cape seas; S. Pacific; Tasmania; Port Jackson. *Grey Nurse* of the Sydney fishermen. Attains the length of 15 feet.

## / / ALOPIAS VULPES.

*Squalus vulpes*, Gmel. Linn., p. 1496; et auctt.

*Carcharias vulpes*, Cuv., Règne Anim.; De Kay, New York Fauna Fish, p. 348, pl. 61, f. 199; Gay, Hist. Chile Zool. ii, p. 363.

*Alopias vulpes*, Bonap., Faun. Ital. Pesc. iii, p. 66; Müll. & Henle, Plagiost., p. 74, pl. 35, f. 1 (dentition); Day, Brit. Fishes ii, p. 300, pl. 157.

*Alopias vulpes*, Yarrell, Brit. Fishes (ed. 3) ii, p. 512; Günth., Cat. viii, p. 393; Macleay, Aust. Cat. ii, p. 295; Günth., Study of Fishes, p. 322.

*Hab.*—Temperate and tropical seas of both hemispheres. *Thresher* of Port Jackson. Grows to at least 15 feet.

#### NOTIDANIDÆ.

##### NOTIDANUS INDICUS.

Cuv., Règne Anim.; Günth., Cat. viii, p. 398; Day, Fishes of India, p. 723, pl. 189, f. 4; Macleay, Aust. Cat. ii, p. 296; M'Coy, Prodr. Zool. Vict. dec. v, pl. 43, f. 2; Günth., Study of Fishes, p. 324, pl. 115 (dentition).

*Heptanchus indicus*, Müll. & Henle, Plagiost., p. 82, pl. 32; Schleg., Faun. Japon. Poiss., p. 303; M'Don. & Barr., Proc. Zool. Soc. 1868, p. 371, pl. 33; Haswell, Proc. Linn. Soc. N. S. Wales ix, p. 88, pl. 1, f. 5.

*Hab.*—Indian seas; Japan; California; Cape seas; Australian seas; Jervis Bay; Port Jackson. *One-finned Shark* of Sydney. Attains a length of 8 feet.

#### SCYLLIIDÆ.

##### SCYLLIUM ANALE.

Ogilby, Proc. Linn. Soc. N. S. Wales x, pp. 445, 464.

*Hab.*—Port Jackson. *Spotted Dog-fish*. Grows to the length of 2 feet.

##### SCYLLIUM MACULATUM.

*Squalus maculatus*, Bl. Schn., p. 130 (not auctt.).

*Scyllium maculatum*, Günth., Cat. viii, p. 401; Macleay, Aust. Cat. ii, p. 297; Ogilby, Proc. Linn. Soc. N. S. Wales x, p. 464.

*Hab.*—Australian seas (Günther.) Port Darwin and Port Jackson (Macleay). Grows to the length of 2 feet (Macleay).

##### CHILOSCYLLIUM OCCELLATUM.

*Squalus ocellatus*, Gmel, Linn. i, p. 1494; Bl. Schn., p. 129.

*Hemiscyllium oculatum*, Müll. & Henle, Plagiost., p. 16; Duméril, Elasmobr., p. 326.

*Chiloscyllium ocellatum*, Günth., Cat. viii, p. 410; Macleay, Aust. Cat. ii, p. 299; Ogilby, Proc. Linn. Soc. N. S. Wales x, p. 464.

*Hab.*—N. Australia; Port Jackson (Ogilby). Grows to the length of 3 feet.

##### CHILOSCYLLIUM MODESTUM.

Günth., Proc. Zool. Soc. 1871, p. 654, pl. 54; Macleay, Aust. Cat. ii, p. 299.

*Chiloscyllium furvum*, Macleay, Aust. Cat. ii, p. 300.

*Hab.*—East coast of Australia; Port Jackson. *Dusky Dog-fish*. Grows to 3 feet in length.

#### 7 CROSSORHINUS BARBATUS.

*Squalus barbatus*, Gmel. Linn., p. 1493.

*Crossorhinus barbatus*, Müll. & Henle, Plagiost., p. 21, pl. 5; Schleg., Faun. Japon. Poiss., p. 301; Duméril, Elasmobr., p. 338; Günth., Cat. viii, p. 414; Macleay, Aust. Cat. ii, p. 301; M'Coy, Prodr. Zool. Vict. dec. v, p. 43, f. 1; Haswell, Proc. Linn. Soc. N. S. Wales ix, p. 92, pl. 1, ff. 6-8; Tenison-Woods, Fisheries of N. S. Wales, p. 94.

— *ornatus*, De Vis, Proc. Linn. Soc. N. S. Wales viii, p. 289.

*Hab.*—Japanese and Australian seas; Tasmania; Port Jackson. *Wobbegong* at Sydney. Attains to 8 feet long.

The Australian Museum possesses a specimen of the *Crossorhinus ornatus* of De Vis, taken at Port Stephens, but I can only consider it to be a well-marked variety of the ordinary form. A second specimen brought in from Port Jackson to-day (28th Sept., 1885) confirms this opinion; it measures 4½ feet.

## HETERODONTIDÆ.

### ♂ HETERODONTUS PHILLIPI.

*Squalus phillippi*, Bl. Schn., p. 134.

*Heterodontus phillipi*, Blainv., Nouv. Bull. Sc. 1816, p. 121; Duméril, Elasmobr., p. 424; Miklouho-Maclay and Macleay, Proc. Linn. Soc. N. S. Wales iii, p. 309, pls. 22-24.

*Cestracion phillipi*, Cuv., Règne Anim.; Müll. & Henle, Plagiost., p. 76, pl. 31; Schleg., Faun. Japon. Poiss., p. 304; Strüver, Nov. Act. Acad. Carol. Leopold. Nat. eur. xxiii, 1864; Zaddach, Schr. Ges. Konigsb. 1872, p. 6; Günth., Cat. viii, p. 415 and Study of Fishes, p. 329, ff. 119, 120 (*jaws*).

*Hab.*—Australian and New Zealand seas; Port Jackson, common. *Port Jackson Shark* of the fishermen; *Tabbigaw* of the aborigines. Attains a length of 4½ feet.

### HETERODONTUS GALEATUS.

*Cestracion galeatus*, Günth., Cat. viii, p. 416 and Study of Fishes, p. 330, pl. 122.

*Heterodontus galeatus*, Miklouho-Maclay and Macleay, Proc. Linn. Soc. N. S. Wales iii, p. 313, pl. 25.

*Hab.*—Coast of New South Wales. Grows to 3½ feet in length, and is common, but generally confounded with its congener.

## SPINACIDÆ.

### ACANTHIAS MEGALOPS.

Macleay, Aust. Cat. ii, p. 303; ? Richardson, Voy. Erebus and Terror Fishes, p. 44, pl. 28, ff. 1, 2.

*Hab.*—Port Jackson. Grows to 3 feet in length.

## RHINIDÆ.

### RHINA SQUATINA.

*Squalus squatina*, Linn., Syst. Nat. i, p. 398.

*Squatina vulgaris*, Müll. & Henle, Plagiost., p. 99, pl. 35, f. 4 (*snout*); Schleg., Faun. Japon. Poiss., p. 305, pl. 86.

*Rhina squatina*, Raf. Ind., p. 45; Duméril, Elasmobr., p. 464; Günth., Cat. viii, p. 430, and Study of Fishes, p. 334; Macleay, Aust. Cat. ii, p. 304; McCoy, Prodr. Zool. Vict. dec. iv, pl. 34; Day, Brit. Fishes ii, p. 326, pl. 163.

*Hab.*—Temperate and tropical seas; Port Jackson, common. *Angel Shark* of Sydney. Grows to 6 feet.

## PRISTIOPHORIDÆ.

### PRISTIOPHORUS CIRRATUS.

*Pristis cirratus*, Lath., Trans. Linn. Soc. ii, p. 281, pl. 26, ff. 5 & 27.

*Pristiophorus cirratus*, Müll. & Henle, Plagiost., p. 98; Günth., Cat. viii, p. 432; Macleay, Aust. Cat. ii, p. 305; Haswell, Proc. Linn. Soc. N. S. Wales ix, p. 98, pl. 1, ff. 9-12.

*Hab.*—South and east coasts of Australia; Tasmania; Port Jackson. *Saw Shark* of the fishermen. Attains to 4 feet in length.

## BATOIDEI.

## RHINOBATIDÆ.

### RHYNCHOBATUS DJEDDENSIS.

*Raja djiddensis*, Forsk., Descr. Anim., p. 18.

*Rhinobatus lærvis*, Bl. Schn. p. 354, pl. 71; Schleg., Faun. Japon. Poiss., p. 306, pl. 139.

*Rhynchobatus lærvis*, Müll. & Henle, Plagiost., p. 111; Duméril, Elasmobr., p. 483.

*Rhynchobatus djeddensis*, Cant., Mal. Fish., p. 412; Günth., Cat. viii, p. 411; Klunz., Fisch. Roth. Meer. 1871, p. 674; Day, Fishes of India, p. 730, pl. 192, f. 1; Günther, Study of Fishes, p. 338, f. 125 (dentition); Ogilby, Proc. Linn. Soc. N. S. Wales x, p. 465.

*Hab.*—East African, Indian, Japanese, and Australian seas; Port Jackson. Grows to the length of 7 feet.

#### 24 RHINOBATUS GRANULATUS.

*Rhinobatus rhinobatus*, Bl. Schn., p. 353.

— *granulatus*, Cuv., Règne Anim., Müll. & Henle, Plagiost., p. 117, pl. 38; Duméril, Elasmobr., p. 493; Günth., Cat. viii, p. 443; Day, Fishes of India, p. 732, pl. 192, f. 2; Macleay, Aust. Cat. ii, p. 307; Ogilby, Proc. Linn. Soc. N. S. Wales x, p. 465.

*Hab.*—East Indian and Australian seas; Port Jackson (Macleay). I have not seen a New South Wales example of this fish, which appears to have been confounded with the following by writers on the Australian fauna. Attains to 7 feet in length.

#### RHINOBATUS BOUGAINVILLEI.

*Rhinobatus (Syrrhina) bougainvillii*, Müll. & Henle, Plagiost., p. 117; Duméril, Elasmobr., p. 491, pl. 10, f. 1 (mouth.)

— *bougainvillii*, Günth., Cat. viii, p. 445; Ogilby, Proc. Linn. Soc. N. S. Wales x, p. 464.

*Hab.*—Port Jackson. *Shovel-nosed Ray* of Sydney fishermen. Grows to the length of 4 feet.

#### TRYGONORHINA FASCIATA.

Müll. & Henle, Plagiost. p. 124, pl. 43; Duméril, Elasmobr., p. 502; Günth., Cat. viii, p. 448; Macleay, Aust. Cat. ii, p. 309; Haswell, Proc. Linn. Soc. N. S. Wales ix, p. 107, pl. 2, ff. 1-8.

*Hab.*—South and east coasts of Australia; Port Jackson, common. *Fiddler* of the Sydney fishermen. Attains a length of 4 feet.

#### TORPEDINIDÆ.

##### HYPNOS SUBNIGRUM.

Duméril, Rev. Zool. 1852, p. 279, pl. 12, and Elasmobr., p. 520; Günth., Cat. viii, p. 453; Macleay, Aust. Cat. ii, p. 310; Tenison-Woods, Fisheries of N. S. Wales, p. 100; Haswell, Proc. Linn. Soc. N. S. Wales ix, p. 104, pl. 2, ff. 6 & 7.

*Hab.*—Australian seas; Port Jackson, common. *Numb-fish*, *Cramp-fish*, and *Torpedo*, of the fishermen. Attains 2 feet in length, and over.

#### RAIIDÆ.

##### RAIA AUSTRALIS.

Macleay, Proc. Linn. Soc. N. S. Wales viii, p. 461.

*Hab.*—Outside Port Jackson, in 50 fathoms. Largest specimen measures fifteen inches.

##### RAIA NITIDA.

Günth., Voy. Challenger Shore Fishes, p. 27, pl. 14, f. A.; Macleay, Aust. Cat. App., p. 63.

*Hab.*—Twofold Bay, in 120 fathoms. Specimen measures 8 inches in total length.

*Raia lemprieri* is included by Tenison-Woods (Fisheries of N. S. Wales, p. 26); I know of no authentic record of its occurrence on our coast.

#### TRYGONIDÆ.

##### TRYGON PASTINACA.

*Raia pastinaca*, Linn., Syst. Nat., p. 396; Bl. Schn., p. 460.

*Trygon pastinaca*, Cuv., Règne Anim.; Müll. & Henle, Plagiost., p. 161; Duméril, Elasmobr., p. 603, Günth., Cat., viii, p. 478; Day, Brit. Fishes ii, p. 350, pl. 175; Macleay, Aust. Cat. ii, p. 313; Haswell, Proc. Linn. Soc. N. S. Wales ix, p. 100, pl. 2, ff. 10 & 11.

— *akajei*, Müll. & Henle, l.c., p. 165, pl. 53; Schleg., Faun. Japon. Poiss., p. 308; Duméril, l.c., p. 604.

*Trygon sayi*, Müll. & Henle, l.c., p. 166; Duméril, l.c., p. 603.

*Hab.*—Atlantic Ocean; Mediterranean; Japanese, Chinese, and Australian seas; Port Jackson, (Günther).

31 TRYGON TUBERCULATA.

*Trygon tuberculatus*, Lacép., Hist. Nat. des Poiss. ii, p. 106, pl. 4, f. 1; Duméril, Elasmobr., p. 605.

— *sabina*, Müll. & Henle, Plagiost., p. 163; Duméril, l.c., p. 607.

— *tuberculata*, Günth., Cat. viii, p. 480; Macleay, Aust. Cat. ii, p. 314.

*Hab.*—American region of the Tropical Atlantic; Port Jackson, (Günther).

UROLOPHUS TESTACEUS.

*Trygonoptera testacea*, Müll. & Henle, Plagiost., p. 174, pl. 56.

— *muelleri*, Steind., Sitzsber. Ak. Wiss. Wien lili, 1866, p. 479, pl. 6, f. 5 (*young.*)

— *henlei*, Steind., l.c., f. 4 (*half-grown.*)

— *australis*, Steind., l.c., p. 480, pl. 7.

*Urolophus testaceus*, Günth., Cat. viii, p. 486; Macleay, Aust. Cat. ii, p. 315.

*Hab.*—Australian seas; Port Jackson, abundant. *Sting Ray* of the fishermen. Grows to the length of 30 inches.

UROLOPHUS BUCCULENTUS.

Macleay, Proc. Linn. Soc. N. S. Wales ix, p. 172.

*Hab.*—Outside Port Jackson, 40 to 60 fathoms.

PTEROPLATEA AUSTRALIS.

Ramsay & Ogilby, Proc. Linn. Soc. N. S. Wales x, (*in press*).

*Hab.*—Cape Hawke. Breadth of disk 23 inches in the single specimen forwarded by Mr. J. Brown to the Australian Museum.

MYLIOBATIDÆ.

MYLIOBATIS AQUILA.

*Raia aquila*, Linn., Syst. Nat., p. 396; Bl. Schn., p. 360.

*Myliobatis aquila*, Cuv., Règne Anim.; Müll. & Henle, Plagiost., p. 176; Duméril, Elasmobr., p. 634; Günth., Cat. viii, p. 489, and Study of Fishes, p. 344, f. 129 (*jaws*); Macleay, Aust. Cat. ii, p. 316; Day, Brit. Fishes ii, p. 352, pl. 176.

*Hab.*—Mediterranean and Atlantic; Port Jackson, (Günther).

MYLIOBATIS AUSTRALIS.

Macleay, Aust. Cat. ii, p. 316; M'Coy, Prodr. Zool. Viet. dec. vii, pl. 63.

*Hab.*—Port Jackson.

AETOBATIS NARINARI.

*Raja narinari*, Euph., Vet. Ak. nya. Handl. 1790, xi, p. 217; Bl. Schn. p. 361.

*Aetobatis narinari*, Müll. & Henle, Plagiost., p. 179; Duméril, Elasmobr., p. 641; Günth., Cat. viii, p. 492; Day, Fishes of India, p. 743, pl. 194, f. 4; Macleay, Aust. Cat. ii, p. 317; Ogilby, Proc. Liun. Soc. N. S. Wales x, p. 466.

*Hab.*—Tropical seas; North Australia; Cape Hawke, N. S. Wales; two specimens presented to the Australian Museum by Mr. J. Brown. Attains to 6 feet in breadth of disk.

CERATOPTERA ALFREDI.

Krefft, Macleay, Aust. Cat. ii, p. 317.

*Hab.*—Manly Beach. Specimen now measures about 11 feet in breadth of disk. It is impossible now to differentiate this species, so much has it been destroyed in the process of stuffing. A smaller example, 4½ feet in breadth of disk, taken in Middle Harbour, Port Jackson, is also irrecongnizable from the same cause; there is however a short spine on the tail, (? *Cephaloptera*).

TELEOSTEI.  
ACANTHOPTERYGII.  
PERCIFORMES.

## PERCIDÆ.

## 39 PERCA FLUVIATILIS.

Linn., Syst. Nat. 1766, p. 481; Cuv. & Val., Hist. Nat. des Poiss. ii, p. 20; Günth., Cat. i, p. 58; Steind., Ak. Wiss. Wien, SB, Ixxviii, Abth. i, p. 399; Houghton, Brit. Fresh-water Fishes i, p. 1, pl. 1; Day, Brit. Fishes i, p. 2, pl. 1; Günth., Study of Fishes, chap. iii, & p. 375, pl. 151.

*Hab.*—Fresh waters of Europe, Siberia, and North America; introduced in many waters of New South Wales. *English Perch* of the colonists. Grows to the weight of eight lbs., but is commonly obtained of less than three.

## LATES COLONORUM.

Günth., Ann. & Mag. Nat. Hist. 1863, p. 114; Macleay, Aust. Cat. i, p. 4; Casteln., Proc. Linn. Soc. N. S. Wales iii, p. 365; McCoy, Prodr. Zool. Vict. dec. ii, pl. 14; Tenison-Woods, Fisheries of N. S. Wales, p. 31, pl. 1.

*Dules novem-aculeatus*, Steind., Sitzgsber. Ak. Wiss Wien 1866, liii, p. 428, t. 2, f. 1.

*Lates curtus*, Casteln., Res. on the Fishes of Australia, p. 5.

?——— *similis*, Casteln., Proc. Zool. Soc. Vict. i, p. 44.

?——— *antarcticus*, Casteln., l.c., p. 44.

?——— *victoriae*, Casteln., l.c., p. 45.

*Hab.*—Eastern river system of New South Wales; Gippsland. The *Perch* of the colonists. Attains a weight of 5 lbs.

## LATES RAMSAYI.

Macleay, Aust. Cat. i, p. 6.

*Hab.*—Fresh water pools above Parramatta. I hold the opinion, which is shared by Mr. E. P. Ramsay, that this is only a land-locked form of the preceding species.

## ETELIS sp.

Günth., Voy. Challenger Shore Fishes, p. 27.

*Hab.*—Twofold Bay, 120 fathoms (?). Specimens  $2\frac{1}{2}$  inches long; supposed to be the young of *Etelis carbunculus*, Cuv. & Val.

## EXOPLOSOUS ARMATUS.

*Chaetodon armatus*, White, Voy. N. S. Wales, pl. 39, f. 1.

*Enoplosus whitii*, Lacép., Hist. Nat. des Poiss. iv, p. 541.

——— *armatus*, Cuv. & Val. ii, p. 133, pl. 20; Günth., Cat. i, p. 81; Macleay, Aust. Cat. i, p. 9; Tenison-Woods, Fisheries of N. S. Wales, p. 32, pl. 2.

*Hab.*—East and south coasts of Australia; Port Jackson, abundant. *Old wife*, at Sydney. Grows to the length of 9 inches.

## ANTHIAS LEPIDOPTERUS.

*Perca lepidoptera*, Forst., Descr. Anim., p. 138.

*Epinephelus lepidopterus*, Bl. Schn., p. 302.

*Serranus lepidopterus*, Rich., Ann. Nat. Hist. 1842, ix, p. 18.

*Anthias richardsonii*, Günth., Proc. Zool. Soc. 1869, p. 429, and Ann. Nat. Hist. 1876, xvii (1), p. 39; Macleay, Aust. Cat. i, p. 12.

*Scorpius hectori*, Hutt., Fishes of N. Zeal., p. 4, f. 4, and Trans. N. Zeal. Inst. v, p. 259, pl. 7, and op. cit. ix, p. 353.

*Hab.*—New Zealand, Tasmania, Port Jackson, one specimen in the Macleay Museum, taken in April, 1885. Attains a length of 12 inches.

#### CAPRODON SCHLEGELII.

*Caprodon*, Schleg. Faun. Japon Poiss., p. 64, pl. 30; Rich., Icthyol. China, p. 235 (*male*).

*Anthias schlegelii*, Günth., Cat. i, p. 93 (*male*).

— *longimanus*, Günth., Cat. i, p. 94; Ramsay, Proc. Linn. Soc. N. S. Wales v, p. 294; Macleay, Aust. Cat. i, p. 12; Tenison-Woods, Fisheries of N. S. Wales, p. 33, pl. 3 (*female*).

*Neoanthias guentheri*, Casteln., Proc. Linn. Soc. N. S. W. iii, p. 367 (*male*).

*Caprodon schlegeli*, Ogilby, Proc. Linn. Soc. N. S. Wales x, p. 231.

*Hab.*—Japan; Port Jackson, scarce, in summer only. *Longfin*, (Tenison-Woods). Attains a length of 15 inches.

#### SERRANUS V. DEMELI.

Günth., Ann. Nat. Hist. 1876, (4) xvii, p. 391; Casteln., Proc. Linn. Soc. N. S. Wales iii, p. 365; Macleay, Proc. Linn. Soc. N. S. Wales viii, p. 254; Tenison-Woods, Fisheries of N. S. Wales, p. 33.

*Hab.*—N. S. Wales coast; Normanby Island, D'Entrecasteaux Group, in fresh water. *Black rock-cod*, of Port Jackson. Grows to the length of 2 feet, and is an excellent fish for the table.

#### SERRANUS GUTTULATUS.

Macleay, Proc. Linn. Soc. N. S. Wales iii, p. 33, pl. 2.

*Hab.*—Port Jackson. Grows to 14 inches in length.

#### SERRANUS UNDULATO-STRIATUS.

Peters, Monatssber. Ak. Wiss. Berlin 1866, p. 518; Casteln., Proc. Linn. Soc. N. S. Wales iii, p. 366.

*Hab.*—Port Jackson. Specimen measured 11 inches.

#### SERRANUS MERRA.

*Epinephelus merra*, Bl., t. 329 (*not Bleeker*).

*Serranus gilberti*, Rich., Ann. Nat. Hist. 1842, p. 19, & Icthyol. China, p. 230; Günth., Cat. i, p. 148, & i, p. 141 (part); Macleay, Aust. Cat. i, p. 19; Day, Fishes of India, pp. 13 & 746, pl. 2, f. 2.

— *megachir*, Rich., Icthyol. China, p. 230.

— *pardalis*, Bleek., Atl. Icthyol. Perc. p. 37, t. 44, f. 3.

*Hab.*—Red Sea; Indian, Chinese and Malayan seas; north and east coast of Australia; Port Jackson, rare. 9 inches in length.

#### SERRANUS FUSCO-GUTTATUS.

Rüpp., Atl. Fische, p. 108, t. 27, f. 2; Günth., Cat. i, p. 127; Kner, Voy. Novara Fische, p. 22; Macleay, Aust. Cat. i, p. 16; Day, Fishes of India, p. 22, pl. 5, f. 3.

*Serranus horridus*, Cuv. & Val. ii, p. 321; Günth., Cat. i, p. 136.

— *geographicus*, Cuv. & Val. ii, p. 322; Günth., Cat. i, p. 150.

— *dispar*, Playf., Fishes of Zanzibar, p. 6, pl. i, ff. 2, 3.

*Epinephelus horridus*, Bleek., Atl. Icthyol. Perc., t. 29, f. 3.

*Hab.*—East African, Indian, and Malayan seas; north and east coasts of Australia; Port Jackson, rare. Ten inches long.

Count Castelnau, in a list of Port Jackson fishes (Proc. Linn. Soc. N. S. Wales iii, p. 319), includes *Serranus guttatus*, C. & V. In the absence of the specimen or of a description I am unable to determine whether *S. miniatus* (Forsk.) Rüpp., or *S. guttatus*, (Bl.) Peters is intended.

/ PLECTROPOMA NIGRO-RUBRUM.

Cuv. & Val. ii, p. 402; Quoy & Gaim., Voy. Astrolabe Poiss., p. 659, pl. 4, f. 1; Günth., Cat. i, p. 158; Macleay, Aust. Cat. i, p. 22; Ogilby, Proc. Linn. Soc. N. S. Wales x, p. 119.

*Hab.*—Southern and eastern coasts of Australia; Port Jackson, scarce. Attains a length of 10 inches.

PLECTROPOMA ANNULATUM.

Günth., Cat. i, p. 158, & Brench., Cruise of the Curaçoa, p. 415, pl. 28, f. B; Casteln., Proc. Linn. Soc. N. S. Wales iii, p. 369.

*Hab.*—Port Jackson. Grows to 8 inches in length.

PLECTROPOMA SEMICINCTUM.

Cuv. & Val. ix, p. 442; Gay, Hist. Chile Zool., p. 153., Ictiol. pl. 2, f. 1; Günth., Cat. i, p. 160; Macleay, Aust. Cat. i, p. 22.

*Hab.*—Chili; Juan Fernandez; West Australia; Port Jackson. Eight inches long.

PLECTROPOMA OCCELLATUM.

Günth., Cat. i, p. 504, and Brench., Cruise of the Curaçoa, p. 416, pl. 29; Macleay, Aust. Cat. i, p. 23; Tenison-Woods, Fisheries of N. S. Wales, p. 34, pl. 4.

*Plectropoma cyanostigma*, Günth., Cat. i, p. 161, (not Bleeker).

— *myriaster*, Steind., Sitzgsber. Ak. Wiss. Wien 1866, liii, p. 426, t. 1, f. 3.

*Hab.*—Australian seas; Port Jackson, common. *Wirrah* of the Aborigines. Grows to 12 inches in length. A very inferior fish for the table.

PLECTROPOMA SUSUKI.

Cuv. & Val. ii, p. 404; Schleg., Faun. Japon. Poiss., p. 11, pl. 4, f. 1; Rich., Ichthyol. China, p. 230; Günth., Cat. i, p. 160, and Proc. Zool. Soc. 1867, p. 100; Macleay, Aust. Cat. i, p. 23; Day, Fishes of India, p. 20.

?*Perca septem-fasciata*, Thunb., Nov. Ac. Stock. 1793, pl. 1, f. 1.

*Hab.*—Chinese and Japanese seas; Port Jackson (Günther). Attains a length of 12 inches.

Count Castelnau claims to have obtained a specimen of *Plectropoma serratum* (C. & V.) from Port Jackson, but his description (Proc. Linn. Soc. N. S. Wales iii, p. 368) applies more closely to *P. ocellatum*.

LUTIANUS BENGALENSIS.

*Holocentrus bengalensis*, Bl., t. 246, f. 2.

*Diacope octolineata*, Cuv. & Val. ii, p. 418, & vi, p. 526 (part); Schleg., Faun. Japon. Poiss., p. 12, pl. 6, f. 2; Rich., Ichthyol. China, p. 229.

*Genyoroge bengalensis*, Günth., Cat. i, p. 178; Macleay, Aust. Cat. i, p. 28.

*Mesopriion bengalensis*, Kner, Voy. Novara Fische, p. 31; Günth., Fische d. Sudsee, p. 12.

*Diacopus bengalensis*, Casteln. Proc. Linn. Soc. N. S. Wales iii, p. 349.

*Lutianus bengalensis*, Bleek., Atl. Ichthyol. Perc., t. 24, f. 3; Day, Fishes of India, p. 33, pl. 10, f. 4.

*Hab.*—From the east African coast to Polynesia; Port Jackson. Grows to a length of 10 inches.

LUTIANUS JOHNII.

*Anthias johnii*, Bl., t. 318.

*Mesopriion johnii*, Cuv. & Val. ii, p. 443; Günth., Cat. i, p. 200; Kner, Voy. Novara Fische, p. 35; Günth., Fische d. Sudsee, p. 15; Macleay, Aust. Cat. i, p. 29.

*Lutianus johnii*, Day, Fishes of India, p. 42, pl. 13, f. 1.

*Hab.*—East African, Indian, and Malayan seas; North Australia; Richmond River, one specimen from Mr. T. Temperley (Ogilby). Grows to a length of at least 12 inches.

S. LUTIANUS <sup>✓</sup> FULVIFLAMMA.

*Sciæna fulviflamma*, Forsk., Descr. Anim., p. 45.

*Diacope fulviflamma*, Rüpp., Atl. Fische, p. 72, t. 19, f. 2; Cuv. & Val. ii, p. 423.

*Hab.*—From the east coast of Africa to Australia; Bellinger River, N.S. Wales.

LUTIANUS MACLEAYANUS.

Ramsay, Proc. Linn. Soc. N. S. Wales viii, p. 178.

*Hab.*—Port Jackson. Specimen measures 30 inches.

LUTIANUS MARGINATUS.

*Diacope marginata*, Cuv. & Val. ii, p. 425.

*Mesopriion marginatus*, Kner, Voy. Novara Fische, p. 31; Günth., Fische d. Sudsee, p. 13, t. 14.

*Genyoroge marginata*, Günth., Cat. i, p. 181.

*Lutianus marginatus*, Bleek., Lutian., p. 72; Day, Fishes of India, p. 44, pl. 13, f. 5.

*Hab.*—From the east African seas to Polynesia; Port Jackson (Kner). Attains at least 16 inches in length.

GLAUOSOMA SCAPULARE.

Ramsay, (M. SS.), Macleay, Aust. Cat. i, p. 34, pl. 13; Tenison-Woods, Fisheries of N. S. Wales, p. 34.

? *Glaukosoma bürgeri*, Casteln., Proc. Linn. Soc. N. S. Wales iii, p. 350.

*Hab.*—Port Jackson. Grows to a length of 20 inches at least. An excellent food fish.

MURRAYIA GUENTHERI.

Casteln., Proc. Zool. Soc. Vict. i, p. 61; Macleay, Aust. Cat. i, p. 56.

*Hab.*—Murray River. Average length, 14 inches. Klunzinger considers this fish identical with *Macquaria australasica*.

MURRAYIA CYPRINOIDES.

Casteln., Proc. Zool. Soc. Vict. i, p. 62; Macleay, Aust. Cat. i, p. 57.

*Hab.*—Murray River. Attains a length of 12 inches.

MURRAYIA BRAMOIDES.

Casteln., Proc. Zool. Soc. Vict. i, p. 63; Macleay, Aust. Cat. i, p. 57.

*Hab.*—Murray River, rare. Length, 12 inches.

MURRAYIA RIVERINA.

*Dules riverinus*, Krefft, Proc. Zool. Soc. 1867, p. 913.

*Murrayia riverina*, Macleay, Aust. Cat. i, p. 58.

*Hab.*—Murray River and its tributaries.

MURRAYIA JENKINSI.

Macleay, Proc. Linn. Soc. N. S. Wales x, p. 268.

*Hab.*—Yass district of the Murrumbidgee. Specimen measured 5 inches.

RIVERINA FLUVIATILIS.

Casteln., Proc. Zool. Soc. Vict. i, p. 64; Macleay, Aust. Cat. i, p. 58.

*Hab.*—Murray River.

MACQUARIA AUSTRALASICA.

Cuv. & Val. v, p. 377, pl. 131; Less, Voy. Coquille Zool. ii, p. 194, pl. 14, f. 1; Günth., Cat. i, p. 286  
Macleay, Aust. Cat. i, p. 59.

*Hab.*—Macquarie River.

## 69 CTENOLATES AMBIGUUS.

*Datnia ambigua*, Rich., Voy. Erebus & Terror Fishes, p. 25, pl. 19.

*Dules ambiguus*, Günth., Cat. i, p. 270; Klunz., S.B. Ak. Wien lxxx, Abth. i, p. 337, pl. 1, f. 1.

— *auratus*, Casteln., Proc. Zool. Soc. Vict. i, p. 55.

*Ctenolates macquariensis*, Günth., Proc. Zool. Soc. 1871, p. 390, pl. 33.

— *ambiguus*, Macleay, Aust. Cat. i, p. 54; Tenison-Woods, Fisheries of N.S. Wales, p. 103.

*Hab.*—All the rivers of the Murray system. *Golden Perch* and *Yellow-belly* of the colonists; *Kaakaalain* of the Murrumbidgee aborigines. Attains a length of at least 16 inches.

## CTENOLATES CHRISTYI.

*Dules christyi*, Casteln., Proc. Zool. Soc. Vict. i, p. 57.

*Ctenolates christyi*, Macleay, Aust. Cat. i, p. 55.

*Hab.*—Edwards River, near Deniliquin.

## CTENOLATES FLAVESCENS.

*Dules flavescens*, Casteln., Res. on the Fishes of Australia, p. 10.

*Ctenolates flavescens*, Macleay, Aust. Cat. i, p. 55.

*Hab.*—Murray River. Specimen measured 19 inches.

Steindachner (Sitzgsber. Ak. Wiss. Wien lvi, p. 320) describes a *Dules reinhardtii*. I have not had an opportunity of seeing the description of this species, and am therefore unable to include it in my list. The example is said to be from Port Jackson.

## THERAPON CUVIERI.

*Pristipoma sex-lineatum*, Quoy & Gaim., Voy. Freyc. Poiss., p. 320.

*Pelates sex-lineatus*, *quadri-lineatus*, et *quinqe-lineatus*, Cuv. & Val. ii, p. 146, et seq., pl. 55; Less., Voy. Coquille Zool. ii, p. 223.

*Therapon cuvieri*, Bleek., Nat. Tydschr. Nederl. Indie vi, p. 211, and Atl. Ichthyol. Perc., pl. 37, f. 2; Günth., Cat. i, p. 282; Macleay, Aust. Cat. i, p. 62.

*Hab.*—Sea of Timor; South coast of New Guinea; North and east coasts of Australia; Port Jackson, abundant. *Mado* and *Trumpeter Perch* at Sydney. Grows but rarely to a length of 12 inches. Of no commercial value.

Our fish is certainly distinct from that described as *Therapon quadri-lineatus*, Bl., by Day (Fishes of India, p. 70, pl. 18, f. 5), below which he places *T. cuvieri*, Bleek., as a synonym.

## THERAPON RICHARDSONII.

Casteln., Proc. Zool. Soc. Vict. i, p. 60; Macleay, Aust. Cat. i, p. 64; Tenison-Woods, Fisheries of N. S. Wales, p. 104.

*Hab.*—Rivers of the Murray system. *Silver Perch* or *Bream* of the colonists; *Kooberry* of the Murrumbidgee aborigines.

## THERAPON NIGER.

Casteln., Proc. Zool. Soc. Vict. i, p. 59; Macleay, Aust. Cat. i, p. 65.

? *Datnia elliptica*, Rich., Voy. Erebus and Terror Fishes, p. 118, pl. 52, ff. 4-8; Günth., Cat. i, p. 276; Macleay, Aust. Cat. i, p. 63.

*Hab.*—? Rivers of Western Australia; Murray River, rare. Specimen 16 inches in length.

## THERAPON UNICOLOR.

Günth., Cat. i, p. 277; Kner, Sitzgsber. Ak. Wiss. Wien lviii, p. 299, t. 2, f. 4, var.; Macleay, Proc. Linn. Soc. N. S. Wales iii, p. 16, and Aust. Cat. i, p. 65.

*Hab.*—Northern rivers of N. S. Wales; Warialda. Attains at least 7 inches in length.

## 76 THERAPON MACLEAYANUS.

Ramsay, Proc. Linn. Soc. N. S. Wales vi, p. 831.

*Hab.*—Macquarie River. Spawning in November.

Count Castelnau records (Proc. Linn. Soc. N. S. Wales iii, p. 350) *Therapon servus*, Bl. from Port Jackson; it is very doubtful whether his identification was correct.

## HELOTES SEXLINEATUS.

*Therapon sexlineatus*, Quoy & Gaim., Voy. Freyc. Poiss., pl. 60, f. 1.

*Helotes sexlineatus*, Cuv. and Val. iii, p. 149, pl. 56; Günth., Cat. i, p. 285; Kner, Voy. Novara Fische, p. 46, t. 3, f. 1; Bleek., Atl. Ichthiol. Perc., pl. 64, f. 5; Macleay, Proc. Linn. Soc. N. S. Wales ii, p. 348, and Aust. Cat. i, p. 68.

*Hab.*—Australian coasts; Port Jackson. Attains a length of 7 inches.

## AGENOR MODESTUS.

Casteln., Proc. Linn. Soc. N. S. Wales iii, p. 371.

*Hab.*—Port Jackson. Length of specimen 4 inches.

## HYPEROGLYPHE POROSA.

*Diagramma porosa*, Rich., Voy. Erebus and Terror Fishes, p. 26, pl. 16, ff. 5, 6.

*Hyperoglyphe porosa*, Günth., Cat. i, p. 337; Macleay, Aust. Cat. i, p. 72.

*Hab.*—Coasts of Australia; Port Jackson, (Krefft). Typical specimen 5½ inches long.

## LOBOTES SURINAMENSIS.

*Holocentrus surinamensis*, Bl., t. 243.

*Lobotes surinamensis*, Cuv. & Val. v, p. 319; Day, Fishes of India, p. 84, pl. 21, f. 5.

— *somnolentus*, Cuv. & Val. v, p. 32.

— *auctorum*, Günth., Cat. i, p. 338; Macleay, Aust. Cat. i, p. 75.

*Hab.*—East African, Indian, and Malayan seas; Port Jackson; Endeavour River, var. *somnolentus* (Macleay). Grows to the length of 2 feet. An excellent food fish.

## HISTIOPTERUS LABIOSUS.

Günth., Proc. Zool. Soc. 1871, p. 658, pl. 59; Macleay, Aust. Cat. i, p. 74.

*Richardsonia insignis*, Casteln., Proc. Zool. Soc. Vict. i, p. 112.

*Hab.*—South coast of Australia; Botany Bay; Port Jackson; scarce. Attains a length of 30 inches at least.

## GERRES OVATUS.

Günth., Cat. i, p. 343; Casteln., Proc. Linn. Soc. N. S. Wales iii, p. 391; Macleay, Aust. Cat. i, p. 76; Tenison-Woods, Fisheries of N. S. Wales, p. 43.

*Hab.*—South-east coast of Australia; Port Jackson, common. *Silver Bream* and *Silver Belly* of the Sydney fishermen. Grows to 8 inches in length.

## GERRES SUBFASCIATUS.

Cuv. & Val. vi, p. 477; Günth., Cat. i, p. 343; Macleay, Aust. Cat. i, p. 77.

*Hab.*—Port Jackson. Grows to a length of 6 inches.

## GERRES ARGYREUS.

*Sciæna argyrea*, Forst.

*Cichla argyrea*, Bl. Schn., p. 341.

*Gerres waigiensis*, Quoy & Gaim., Voy. Freyc. Zool., p. 292.

*Gerres argyreus*, Cuv. & Val. vi, p. 478; Günth., Cat. i, p. 352; Macleay, Proc. Linn. Soc. N. S. Wales iv, p. 62, & Aust. Cat. i, p. 78.

*Hab.*—From the Red Sea through the Malay Archipelago to the Solomon Islands; Port Jackson (Günther); Richmond River (Ogilby). Attains a length of at least 5 inches.

85 **PENTAPUS SETOSUS.**

Cuv. & Val. vi, p. 270; Günth., Cat. i, p. 382; Bleek., Atl. Ichthyol. Perc., pl. 46, f. 1; Kner, Voy. Novara Fische, p. 60; Macleay, Aust. Cat. i, p. 85.

*Hab.*—Madras & Singapore (Kner); Batavia (Günther); North coast of Australia; Port Jackson (Macleay). Grows to a length of 10 inches.

**APHAREUS ROSEUS.**

Casteln., Proc. Linn. Soc. N. S. Wales iii, p. 373.

*Hab.*—Port Jackson (Castelnau). Specimen measured nearly 24 inches.

OLIGORUS MACQUARIENSIS.

*Grystes macquariensis*, Cuv. & Val. iii, p. 58; Rich., Voy. Erebus & Terror Fishes, p. 118, pl. 53, ff. 8, 9.

— *peelii*, Mitch., Exped. Austr., pl. 5, f. 1.

*Oligorus macquariensis*, Günth., Cat. i, p. 251, and Study of Fishes, p. 392, f. 164; Macleay, Aust. Cat. i, p. 52; and Proc. Linn. Soc. N. S. Wales viii, p. 200; Tenison-Woods, Fisheries of N. S. Wales, p. 102, pl. 41.

*Hab.*—Murray River and its tributaries; northern rivers of the eastern watershed of N. S. Wales. *Murray Cod* of the colonists; *Kookoobul* of the Murrumbidgee aborigines; *Pundy* on the Lower Murray. Attains a weight of 120 lbs. An excellent food fish. Spawns from November to January.

OLIGORUS MITCHELLI.

Casteln., Proc. Zool. Soc. Viet. ii, p. 150; Macleay, Aust. Cat. i, p. 53; Tenison-Woods, Fisheries of N. S. Wales, p. 103.

*Hab.*—Rivers of the western watershed of N. S. Wales and Victoria. *Murray Perch* of the fishermen. Grows to a large size. An excellent table fish. I think it probable that this will prove to be identical with the preceding; the differences which have been pointed out are easily attributable to sexual and seasonal causes, insufficiency of food, disease, &c.

OLIGORUS GIBBICEPS.

Macleay, Proc. Linn. Soc. N. S. Wales x, p. 265.

*Hab.*—Murrumbidgee River, near Yass. Specimen measures 8 inches. An Alpine form.

ARRIPIS SALAR.

*Centropristes salmon*, Rich., Trans. Zool. Soc. iii, p. 78; and Voy. Erebus and Terror Fishes, p. 29, pl. 20, ff. 4-6.

— *tasmanicus*, Hombr. & Jacq., Voy. au Pôle Sud Poiss., p. 40, pl. 4, f. 1.

? — *truttaceus*, Cuv. & Val. iii, p. 50.

*Arripis salmon*, Günth., Cat. i, p. 253, and Study of Fishes, p. 393, f. 165; McCoy, Prodr. Zool. Viet. dec. ii, pls. 16, 17; Macleay, Aust. Cat. i, p. 51; Tenison-Woods, Fisheries of N. S. Wales, p. 35, pl. 5.

*Hab.*—New Zealand; Norfolk Island; South and east coasts of Australia; Port Jackson, common. *Salmon* of the fishermen when full grown; *Salmon Trout* when of medium size. Attains a length of 2 feet. A poor fish for the table, but of considerable commercial value on account of its size and abundance.

71 ARRIPIIS GEORGIANUS.

*Centropristes georgianus*, Cuv. & Val. vii, p. 451; Rieh., Voy. Erebus and Terror Fishes, p. 117, pl. 54, ff. 3-6.

*Arripis georgianus*, Jenyns, Voy. Beagle, p. 14; Günth., Cat. i, p. 253; Macleay, Aust. Cat. i, p. 50.

*Hab.*—South and west coast of Australia; Norfolk Island; Port Jackson, (Günther). *Ruffy* of Victorian fishermen, (M'Coy). Grows to a length of 12 inches.

AMBASSIS COMMERSONII.

*Centropomus ambassis*, Lacép. iv, p. 273.

*Ambassis commersonii*, Cuv. & Val. ii, p. 176, pl. 25; Günth., Cat. i, p. 223; Bleek., Atl. Ichthyol. Perc., t. 74, f. 1; Day, Fishes of India, p. 52, pl. 15, f. 3; Macleay, Aust. Cat. i, p. 37, and Proc. Linn. Soc. N. S. Wales viii, p. 255; Kner, Voy. Novara Fische, p. 41.

*Hab.*—From the Red Sea through those of India to North-east Australia; Richmond River; specimens obtained by Mr. T. Temperley (Ogilby). Enters fresh water. Attains a length of 6 inches.

AMBASSIS AGASSIZII.

Steind., Sitzgsber. Ak. Wiss. Wien lv, 1867, p. 9; Günth., Ann. Nat. Hist. 1867, xx, p. 57; Macleay, Aust. Cat. i, p. 38.

*Hab.*—Queensland, (Steindachner); Clarence River, (Krefft).

AMBASSIS CASTELNAUI.

*Pseudoambassis castelnaui*, Macleay, Aust. Cat. i, p. 39.

*Hab.*—Murrumbidgee River.

AMBASSIS RAMSAYI.

*Pseudoambassis ramsayi*, Macleay, Aust. Cat. i, p. 40.

*Hab.*—Port Jackson. Specimen measures 3 inches.

AMBASSIS JACKSONIENSIS.

*Pseudoambassis jacksoniensis*, Macleay, Aust. Cat. i, p. 40.

*Hab.*—Port Jackson. Average length 2 inches.

NANNOOPERCA AUSTRALIS.

Günth., Proc. Zool. Soc. 1861, p. 116, pl. 19, f. 2; Macleay, Aust. Cat. i, p. 42.

*Paradules latus*, Klunz.

*Hab.*—Murray River. Grows to the length of 3 inches.

NANNOOPERCA RIVERINÆ.

Macleay, Aust. Cat. i, p. 42.

*Hab.*—Murrumbidgee River. Length of specimen 2 inches.

APOGON FASCIATUS.

*Mullus fasciatus*, White, Voy. N. S. Wales, p. 268, f. 1.

*Apogon novem-fasciatus*, Cuv. & Val. ii, p. 154; Kner, Voy. Novara Fische, p. 43.

— *fasciatus*, Quoy & Gaim., Voy. Freyc. Zool. p. 344; Günth., Cat. i, p. 241, and Fische d. Sudsee, p. 19, pl. 20, ff. A, B.; Kner, Voy. Novara Fische, p. 43; All. & Macl., Proc. Linn. Soc. N. S. Wales i, p. 267; Casteln., Proc. Linn. Soc. N. S. Wales iii, p. 370; Macleay, Aust. Cat. i, p. 43.

— *aroubiensis*, Hombr. & Jacq., Voy. au Pôle Sud. Poiss., p. 31, pl. 1, f. 1.

— *balinensis*, Bleek., Perc. p. 28.

*Apogon endeka-tænia*, Bleek., Banka, p. 449.

*Amia fasciata*, Gill, Proc. Nat. Soc. Phil. 1863 ; Bleek, Atl. Ichthyol. Perc. t. 48, f. 4.

— *endeka-tænia*, Bleek., Atl. Ichthyol. Perc. t. 32, f. 2.

*Hab.*—East African, Indian, Malayan, and Australian seas ; Fiji Islands ; Port Jackson, common. Attains a length of 5 inches. A very variable species.

### 100 APOGON GUNTHERI.

*Apogon guntheri*, Casteln., Proc. Zool. Soc. Vict. i, p. 45 ; Ramsay, Proc. Linn. Soc. N. S. Wales vii, p. 110 ; Macleay, Aust. Cat. i, p. 45.

? — *novæ-hollandiæ*, Val., Nouv. Ann. Mus. Hist. Nat. 1832, p. 55, pl. 4, f. 2 ; Günth., Ann. Nat. Hist. xx, 1867, p. 58 ; Casteln., Proc. Linn. Soc. N. S. Wales iii, p. 350.

*Hab.*—Coasts of Tasmania, Victoria, and New South Wales. Grows to the length of 4 inches.

### APOGON QUADRIFASCIATUS.

Cuv. & Val. ii, p. 153 ; Günth., Cat. i, p. 239 ; Kner, Voy. Novara Fische, p. 43 ; Macleay, Aust. Cat. i, p. 44.

*Amia quadrifasciata*, Bleek., Atl. Ichthyol. Perc. t. 57, f. 1.

*Hab.*—Indian, Japanese, and Malayan seas ; North Australia ; Sydney, (Kner).

### APOGON GILLII.

*Apogonichthys gillii*, Steind., Sitzgsber. Ak. Wiss. Wien lv, 1867, p. 11, t. 1, f. 1 ; Macleay, Aust. Cat. i, p. 47, and Proc. Linn. Soc. N. S. Wales viii, p. 200.

*Apogon gillii*, Günth., Ann. Nat. Hist. (4) xvii, p. 392.

*Mionurus lunatus*, Krefft, Proc. Zool. Soc. 1867, p. 942 (*type specimen in the Australian Museum*).

*Hab.*—Rockhampton (Dämel) ; Cox's River (Krefft). Specimen measures nearly 6 inches.

### PRIACANTHUS MACRACANTHUS.

Cuv. & Val. iii, p. 108 ; Less., Voy. Coquille Zool. Poiss., p. 225 ; Günth., Cat. i, p. 220 ; Casteln., Proc. Linn. Soc. N. S. Wales iii, p. 369 ; Tenison-Woods, Fisheries of N. S. Wales, p. 35.

*Priacanthus bleekeri*, Casteln., Proc. Zool. Soc. Vict. ii, p. 100.

*Hab.*—Japan ; Batavia ; Port Jackson, in May (Casteln.). Attains a length of 12 inches.

### PRIACANTHUS BENMEBARI.

Schleg., Faun. Japon. Poiss., p. 19, pl. 7, f. 1 ; Rich., Ichthyol. China, p. 237 ; Günth., Cat. i, p. 218, and Ann. Nat. Hist. 1867, xx, p. 57 ; Macleay, Aust. Cat. i, p. 37.

*Hab.*—Japanese seas ; Port Jackson (Günther). Attains a length of one foot.

### DINOESTES MUELLERI.

Klunz., Arch. f. Nat. 1872, p. 29, t. 3.

*Neosphyraena multiradiata*, Casteln., Proc. Zool. Soc. Vict. i, p. 96.

*Lanioperca mordax*, Günth., Ann. Nat. Hist. 1872, x, p. 183 ; Macleay, Aust. Cat. ii, p. 36 ; Tenison-Woods, Fisheries of N. S. Wales, pl. 29.

? *Esox lewini*, Griff. Cuv. An. Kingd., ed. x, p. 465, pl. 60, 1834 ; Gill, Ann. Nat. Hist. (4) xiv, p. 159.

*Hab.*—Tasmanian, Victorian, and New South Wales coasts. *Sea-pike* of the Sydney market.

## SQUAMIPINNES.

## CHETODON AURIGA.

Forsk., p. 60; Bl. Schn., p. 226; Cuv. & Val. vii, p. 79; Günth., Cat. ii, p. 7; Day, Fishes of India, p. 106, pl. 27, f. 3.

*Chetodon setifer*, Bl., t. 425, f. 1; Cuv. & Val. vii, p. 76; Günth., Cat. ii, p. 6, and Fische d. Sudsee, p. 36, t. 26, f. B; Kner, Voy. Novara Fische, p. 97; Macleay, Aust. Cat. i, p. 89.

*Hab.*—From the Red Sea to Polynesia; Cape York (Castelnau); Sydney (Kner).

## CHETODON NESOGALLICUS.

Cuv. & Val. vii, p. 63; Günth., Cat. ii, p. 10, and Voy. Challenger Shore Fishes, p. 27.

*Hab.*—Indian Ocean and Archipelago; Botany Bay (Günther).

## CHETODON OLIGACANTHUS.

*Platax ocellatus*, Cuv. & Val. vii, p. 299; Cantor, Cat. p. 170.

*Chetodon oligacanthus*, Bleek., Verh. Bat. Gen. xxiii, Chatod., p. 16; Günth., Cat. ii, pp. 34 and 516; Kner, Voy. Novara Fische, p. 102; Macleay, Proc. Linn. Soc. N. S. Wales ii, p. 351, and Aust. Cat. i, p. 88; Day, Fishes of India, p. 109.

*Hab.*—Indian and Malayan seas; Philippine Islands; Port Darwin and Port Jackson (Macleay).

## CHETODON STRIGATUS.

Cuv. & Val. vii, p. 25, pl. 120; Schleg., Faun. Japon. Poiss., p. 80, pl. 41, f. 1; Günth., Cat. ii, p. 34, and Fische d. Sudsee, p. 47; Macleay, Aust. Cat. i, p. 87.

? *Neochetodon vittatum*, Casteln., Proc. Zool. Soc. Vict. ii, p. 130, and Proc. Linn. Soc. N. S. Wales iii, p. 375; Macleay, Aust. Cat. i, p. 90.

*Hab.*—Chinese and Japanese seas; Port Jackson (Castelnau); ? W. Australia (Castelnau); Clarence River (Ogilby). Length 5 inches, sent by Mr. T. Temperley.

## CHETODON SEXFASCIATUS.

Rich., Ann. Nat. Hist. x, 1842, p. 26; Gunth., Cat. ii, p. 35; Casteln., Proc. Linn. Soc. N. S. Wales iii, p. 3; Macleay, Aust. Cat. i, p. 88.

*Hab.*—West Coast of Australia; Port Jackson (Krefft).

## CHELMO TRUNCATUS.

Kner, Sitzgsber. Ak. Wiss. Wien xxxiv, p. 442, t. 2; Günth., Cat. ii, p. 516; Macleay, Aust. Cat. i, p. 92.

*Hab.*—King George's Sound; Port Hacking; Port Jackson. Attains a length of 8 inches.

## SCATOPHAGUS ARGUS.

*Chetodon argus*, Linn. Gmel., p. 1248; Bl., t. 204, f. 1.

*Scatophagus argus*, Cuv. & Val. vii, p. 136; Günth., Cat. ii, p. 58, and Ann. Nat. Hist. 1867, p. 58; Kner, Voy. Novara Fische, p. 106; Day, Fishes of India, p. 114, pl. 29, f. 3, and Journ. Linn. Soc. xi, p. 524; Casteln., Proc. Linn. Soc. N. S. Wales ii, p. 234; Macleay, Aust. Cat. i, p. 95.

— *ornatus*, Cuv. & Val. vii, p. 143, pl. 180; Günth., Cat. ii, p. 59 (*young*).

*Hab.*—Indian, Chinese, and Australian seas, entering rivers; Port Jackson. Grows to the length of 14 inches. Said to be a well-flavored fish, but seldom eaten on account of its reputation for foul feeding.

## SCATOPHAGUS MULTIFASCIATUS.

Rich., Voy. Erebus and Terror Fishes, p. 57, pl. 35, ff. 4-6; Günth., Cat. ii, p. 60; All. & MacL., Proc. Linn. Soc. N. S. Wales i, p. 277; Casteln., Proc. Linn. Soc. N. S. Wales ii, p. 235, and iii, p. 376; Macleay, Aust. Cat. ii, p. 96.

*Hab.*—Coasts of Australia; Port Jackson. Attains a length of 16 inches.

— *SCORPIS EQUIPINNIS.*

Rich., Voy. *Erebus* and *Terror* Fishes, p. 121; Günth., Cat. ii, p. 64; Casteln., Proc. Linn. Soc. N. S. Wales iii, p. 376; Macleay, Aust. Cat. i, p. 97; Tenison-Woods, Fisheries of N. S. Wales, p. 37, pl. 6.

*Scorpis boops*, Peters, Monatsber. Ak. Wiss. Berlin 1866, p. 519.

— *lineolata*, Kner, Voy. *Novara* Fische, p. 108, pl. 5, f. 3.

*Hab.*—Australian coasts; Port Jackson, abundant. The *Sweep* of the Sydney market. Grows to a foot in length.

ATYPUS STRIGATUS.

Günth., Cat. ii, p. 64; Macleay, Aust. Cat. i, p. 98.

*Atypichthys strigatus*, Günth., Cat. iv, p. 510 (note); Casteln., Proc. Linn. Soc. N. S. Wales iii, p. 375; Steind., Sitzsber. Ak. Wiss. Wien 1866, liii, p. 435, pl. 4, f. 2.

*Hab.*—Swan River; coast of New South Wales. *Mudo* of the Sydney fishermen, by whom it is confounded with *Therapon cuvieri*. Grows to a length of 6 inches.

MULLIDÆ.

HYPENEOIDES TRAGULA.

*Upeneus tragula*, Rich., Ichthyol. China, p. 220.

*Upeneoides tragula*, Günth., Cat. i, p. 398; Kner, Voy. *Novara* Fische, p. 66; Day, Fishes of India, p. 121, pl. 30, f. 4; Bleek, Atl. Ichthyol. Mull. pl. 2, f. 2; Macleay, Aust. Cat. i, p. 102.

*Hab.*—From the east coast of Africa to the Malay Archipelago; north coast of Australia; Port Jackson. Attains at least  $4\frac{1}{2}$  inches in length (Day).

HYPENEUS VLAMINGII.

*Upeneus Vlamingii*, Cuv. & Val. iii, p. 452, pl. 71; Rich., Ann. Nat. Hist. 1842. ix, p. 211.

*Upeneoides vlamingii*, Günth., Cat. i, p. 400; Casteln., Proc. Linn. Soc. N. S. Wales iii, p. 372; Macleay, Aust. Cat. i, p. 103.

*Upeneichthys vlamingii*, Hector, Trans. N. Zeal. Inst. ix, p. 465, pl. 9, f. 5, & Ann. Nat. Hist. (4) xix, p. 340.

*Hab.*—Queen Charlotte's Sound (Richardson); Port Phillip; Port Jackson, common. Attains to a foot in length. An excellent table fish.

Dr. Hector is undoubtedly correct in removing this species from the genus *Hypeneoides*; it has no palatine teeth.

HYPENEUS POROSUS.

*Upeneus porosus*, Cuv. & Val. iii, p. 455; Casteln., Proc. Linn. Soc. N. S. Wales iii, p. 371; Macleay, Aust. Cat. i, p. 105.

*Upeneichthys porosus*, Günth., Cat. i, p. 400.

*Hab.*—New Zealand; Tasmania; Australia; Port Jackson; not common, February to May. (Castelnau). *Pink-check* at Sydney (Castelnau).

HYPENEUS SIGNATUS.

*Upencus signatus*, Günth., Ann. Nat. Hist. 1867, xx, p. 59; Macleay, Aust. Cat. i, p. 106.

*Hab.*—Port Jackson. Grows to 6 inches long.

SPARIDÆ.

PACHYMETOPON GRANDE. =

Günth., Cat. i, p. 424; Macleay, Aust. Cat. i, p. 106.

*Hab.*—Port Jackson. Attains a length of 18 inches.

## GIRELLA TRICUSPIDATA.

*Box tricuspidatus*, Quoy & Gaim., Voy. Freyc. Zool., p. 296.

*Oblata tricuspidata*, Cuv. & Val. vi, p. 372.

*Crenidens triglyphus*, Rich., Voy. Erebus & Terror Fishes, p. 36, pl. 25, f. 2.

*Girella tricuspidata*, Günth., Cat. i, p. 428; Macleay, Aust. Cat. i, p. 107; Johnston, Rep. Roy. Soc. Tasm. 1881, p. 49; Tenison-Woods, Fisheries of N. S. Wales, p. 39, pl. 7.

*Hab.*—Coasts of Victoria, Tasmania, and New South Wales. *Blackfish* of the Sydney Market. Grows to a length of 16 inches. A moderate food fish.

## GIBELLA SIMPLEX.

*Crenidens simplex*, Rich., Voy. Erebus & Terror Fishes, p. 120.

*Girella simplex*, Günth., Cat. i, p. 429; Kner, Voy. Novara Fische, p. 75; Macleay, Aust. Cat. i, p. 107.

— *percoidea*, Hector, Trans. N. Zeal. Inst. vii, p. 243, pl. 10, f. 6 D., & op. cit. ix, p. 468, pl. 8, f. 6 C.

*Hab.*—Coasts of New Zealand, Victoria, and New South Wales. *Blackfish*; confounded with the preceding species by the fishermen. Attains a length of 12 inches.

## GIRELLA ELEVATA.

Macleay, Aust. Cat. i, p. 108.

*Hab.*—Port Jackson. *Drummer* of the Sydney fishermen. Attains a length of 21 inches at least. A poor table fish.

## GIRELLA CYANEA.

Macleay, Aust. Cat. i, p. 109.

*Hab.*—Port Jackson. *Bluefish* of the fishermen.

## GIRELLA RAMSAYI.

Macleay, Aust. Cat. i, p. 109.

*Hab.*—Port Jackson. Length of type specimen 18 inches.

*Girella (Melanichthys) zonata*, Günth., Cat. i, p. 429, is included by Castelnau in his list of Port Jackson fishes, (Proc. Linn. Soc. N. S. Wales iii, p. 350); it is most probably the young of *G. tricuspidata*, which is banded in its immature state.

## TEPHRAEOPS ZEBRA.

*Crenidens zebra*, Rich., Voy. Erebus & Terror Fishes, p. 70.

*Tephraeops zebra*, Günth., Cat. i, p. 432.

*Neotephraeops zebra*, Casteln., Proc. Zool. Soc. Vict. i, pp. 69 & 248; Macleay, Aust. Cat. i, p. 110.

*Girella zebra*, Steind., Sitzgsber. Ak. Wiss. Wien liii, 1866, p. 430, t. 6, f. 2.

*Girellichthys zebra*, Klunz., Arch. f. Nat. 1872, p. 22.

*Hab.*—King George's Sound; Port Jackson, (Steindachner). Grows to a foot in length.

## HAPLODACTYLUS LOPHODON.

Günth., Cat. i, p. 435; Macleay, Aust. Cat. i, p. 111.

*Hab.*—New South Wales coast; Port Jackson, common. Attains a length of 18 inches.

## HAPLODACTYLUS OBSCURUS.

Casteln., Proc. Linn. Soc. N. S. Wales iii, p. 374.

*Hab.*—Port Jackson. Probably an early stage of the preceding.

## LETHRINUS NEMATACANTHUS.

Bleek., Japan, p. 403, & Atl. Ichthiol. Perc., pl. 59, f. 3; Günth., Cat. i, p. 456; All. & MacL., Proc. Linn. Soc. N. S. Wales i, p. 275; Macleay, Aust. Cat. i, p. 112.

*Hab.*—Japan; Louisiade Archipelago; North-east coast of Australia; Port Jackson (Macleay).

## LETHRINUS CHRYSSOTOMUS.

Rich., Voy. Erebus & Terror Fishes, p. 118, pl. 60, ff. 6, 7; Günth., Cat. i, p. 457; All. & MacL., Proc. Linn. Soc. N. S. Wales i, p. 276; Macleay, Aust. Cat. i, p. 112.

*Hab.*—Norfolk Island; north and east coasts of Australia; Port Jackson. Attains a length of 13 inches.

## LETHRINUS HARAK.

*Sciæna harak*, Forsk., Deser. Anim., p. 52.

*Lethrinus harak*, Rüpp., N.W. Fische, p. 116, t. 29, f. 3; Günth., Cat. i, p. 458; Bleek., Atl. Ichthyol. Perc., pl. 49, f. 3; Day, Fishes of India, p. 137, pl. 33, f. 3; Macleay, Aust. Cat. i, p. 114; Kner, Voy. Novara Fische, p. 81.

*Hab.*—From the Red Sea, through the Indian Seas to the Malay Archipelago; Sydney (Kner). It seems probable that Kner's specimens are not identical with Forskal's *S. harak*.

## LETHRINUS GLYPHODON.

Günth., Cat. i, p. 462; Casteln., Proc. Linn. Soc. N. S. Wales iii, p. 372.

*Hab.*—Louisiade Archipelago: Port Jackson (Castelnau). Attains a length of 13 inches.

PAGRUS <sup>✓</sup>UNICOLOR.

*Chrysophrys unicolor*, Quoy & Gaim., Voy. Uranie, p. 209.

*Pagrus unicolor*, Cuv. & Val vi, p. 160; Rich., Ichthyol. China, p. 242; Günth., Cat. i, p. 468; Kner, Voy. Novara Fische, p. 85; Macleay, Aust. Cat. i, p. 116; Tenison-Woods, Fisheries of N. S. Wales, p. 39, pl. 8, and frontispiece.

*Hab.*—New Zealand and Australian seas; Port Jackson, abundant. *Schnapper* of the fishermen; *Wollomai* of the aborigines. Attains a weight of 25 lbs. An excellent food fish.

CHRYSTOPHYS <sup>✓</sup>SARBA.

*Sparus sarba*, Forsk., Deser. Anim., p. 31; Linn. Gmel. p. 1275.

*Chrysophrys sarba*, Cuv. & Val. vi, p. 102; Rüpp., N.W. Fische, p. 110, pl. 28, f. 1; Günth., Cat. i, p. 488; Kner, Voy. Novara Fische, p. 88; Day, Fishes of India, p. 142, pl. 34, f. 6; Macleay, Aust. Cat. i, p. 118; Tenison-Woods, Fisheries of N. S. Wales, p. 42, pl. 9.

*Hab.*—From the Red Sea to the east coast of Australia; Port Jackson, common. Grows to the length of 16 inches. *Tarwhine* of the fishermen. A poor table fish.

CHRYSTOPHYS <sup>✓</sup>AUSTRALIS.

Günth., Cat. i, p. 494; McCoy, Prodr. Zool. Viet. dec. i, pl. 4; Macleay, Aust. Cat. i, p. 119.

*Chrysophrys sarba*, Casteln., Proc. Linn. Soc. N. S. Wales iii, p. 373.

*Hab.*—Australian seas, entering rivers; Port Jackson, abundant. *Black Bream* of the fishermen. Attains to 18 inches in length. Of good flavor.

## CIRRHITIDÆ.

## CIRRHITICHTHYS APRINUS.

*Cirrhites aprinus*, Cuv. & Val. iii, p. 76.

— *graphidopterus*, Bleek, Amboina iii, p. 106.

*Cirrhiticthys graphidopterus*, Günth., Cat. ii, p. 74; Ramsay & Ogilby, Proc. Linn. Soc. N. S. Wales x, (*in press*).

*Hab.*—Amboina; Port Jackson. Attains a length of 5 inches.

CHIRONEMUS <sup>✓</sup>MARMORATUS.

Günth., Cat. ii, p. 76; Macleay, Aust. Cat. i, p. 121.

*Hab.*—Australian coasts. Grows to a foot in length.

## 13% CHILODACTYLUS VITTATUS.

Garrett, Proc. Calif. Ac. Nat. Sc. iii, p. 103; Günth., Fische d. Sudsee, p. 73, pl. 51, f. B; Macleay, Aust. Cat. i, p. 122; Tenison-Woods, Fisheries of N. S. Wales, pl. 13.

*Zeodrius vestitus*, Casteln., Proc. Linn. Soc. N. S. Wales iii, p. 377.

*Hab.*—Sandwich Islands; Port Jackson. Specimen examined 8 inches long.

CHILODACTYLUS<sup>V</sup> MACROPTERUS.

*Sciæna macroptera*, Forst.

*Cichla macroptera*, Bl. Schn., p. 342.

*Chilodactylus macropterus*, Rich., Proc. Zool. Soc. 1850, p. 62, and Ann. Nat. Hist. 1851 vii, p. 278; Günth., Cat. ii, p. 78, and Study of Fishes, p. 411, f. 177; Macleay, Aust. Cat. i, p. 122; Tenison-Woods, Fisheries of N. S. Wales, p. 46, pl. 10.

*Hab.*—Australian seas; Port Jackson, common. *Morwong* and *Jackass-fish* of the Sydney market. Attains a length of 18 inches. Of excellent flavor.

## CHILODACTYLUS GIBBOSUS.

*Chætodon gibbosus*, Banks.

*Chilodactylus gibbosus*, Rich., Trans. Zool. Soc. iii, p. 102, and Proc. Zool. Soc. 1850, p. 65, pl. 2, ff. 3, 4; Günth., Cat. ii, p. 84, & Ann. Nat. Hist. xx, p. 60; Stein & Doder., Denk. Ak. Wien xlvi, p. 27, pl. 7, f. 2; Macleay, Aust. Cat. i, p. 124.

*Hab.*—West and south coasts of Australia; Tasmania; Port Jackson (Krefft).

## CHILODACTYLUS FUSCUS.

Casteln., Proc. Linn. Soc. N. S. Wales iii, p. 376; Macleay, Aust. Cat. i, p. 125; Tenison-Woods, Fisheries of N. S. Wales, p. 46, pl. 11.

*Chilodactylus annularis*, Casteln., I.e., p. 377; Macleay, I.e., p. 125 (*young*).

*Hab.*—Port Jackson, common. *Carp*, of the fishermen. Grows to 16 inches in length. An excellent table fish.

## CHILODACTYLUS MULHALLI.

Macleay, Proc. Linn. Soc. N. S. Wales vii, p. 366.

*Hab.*—Port Jackson. Length of specimen 26 inches.

## PSILOCRANIUM COXII.

Macleay, Proc. Linn. Soc. N. S. Wales viii, p. 439.

*Hab.*—Port Jackson. Length of specimen 32 inches.

## LATRIS CILIARIS.

*Sciæna ciliaris*, Forst., Deser. Anim. ed. Licht., p. 137.

*Latris ciliaris*, Rich., Voy. Erebus and Terror Fishes, p. 37, pl. 26, ff. 6, 7; Günth., Cat. ii, p. 86; Macleay, Aust. Cat. i, p. 126.

*Hab.*—New Zealand; Port Jackson (Richardson). Attains to 30 inches in length. A moderate fish for the table.

## LATRIS RAMSATI.

Ogilby, Proc. Linn. Soc. N. S. Wales x, p. 229.

*Hab.*—Port Jackson. Largest specimen examined, rather more than 21 inches. This may be a variety of *L. forsteri*, Casteln., Proc. Zool. Soc. Viet. i, p. 77.

## SCORPÆNIDÆ.

SERASTES<sup>V</sup> PERCOIDES.

*Scorpæna percoides*, Solander.

*Sebastes maculatus*, Rich., Trans. Zool. Soc. iii, p. 93 (*not Cur. & Val. nor Smith*).

*Sebastes percoides*, Rich., Ann. Nat. Hist. 1842, ix, p. 384, & Voy. Erebus and Terror Fishes, p. 23, pl. 15, ff. 1, 2; Günth., Cat. ii, p. 101, and Study of Fishes, p. 412, f. 178; Casteln., Proc. Linn. Soc. N. S. Wales iii, p. 379; M'Coy, Prodr. Zool. Vict. dec. iv, p. 17, pl. 33; Hutton, Trans. N. Z. Inst. v, pl. 8; Macleay, Aust. Cat. i, p. 129; Tenison-Woods, Fish. of N. S. Wales, pl. 14.

? ————— *allporti*, Casteln., Proc. Zool. Soc. Vict. i, p. 40.

*Hab.*—New Zealand; Tasmania; Victoria; Port Jackson, scarce. *Red Gurnard Perch*, at Melbourne. Grows to the length of 12 inches.

#### 147 SEBASTES SCABER.

Ramsay and Ogilby, Proc. Linn. Soc. N. S. Wales x, (*in press*).

*Hab.*—Port Jackson. Largest specimen,  $2\frac{1}{4}$  inches.

#### SCORPENA CRUENTA.

(Solander), Rich., Ann. Nat. Hist. 1842, ix, p. 217; Günth., Cat. ii, p. 112; Casteln., Proc. Linn. Soc. N. S. Wales iii, p. 378; Hutton, Trans. N. Z. Inst. v, pl. 8; Macleay, Aust. Cat. i, p. 130.

*Scorpæna militaris*, Rich., Voy. Erebus and Terror Fishes, p. 22, pl. 14, ff. 1, 2.

*Hab.*—New Zealand; Tasmania; Victoria; New South Wales; Port Jackson, common. *Red Rock Cod* of Sydney fishermen. Grows to the length of eighteen inches. A fair food fish.

#### SCORPENA BYNÖENSIS.

Rich., Voy. Erebus and Terror Fishes, p. 22, pl. 14, ff. 3-5; Günth., Cat. ii, p. 113, and Study of Fishes, p. 414, f. 180; All. & MacL., Proc. Linn. Soc. N. S. Wales i, p. 278; Macleay, l.c. ii, p. 353, and Aust. Cat. i, p. 131.

*Scorpæna jacksoniensis*, Steind., Sitzgsber. Ak. Wiss. Wien liii, 1866, p. 438, t. 3, f. 2.

*Hab.*—North and east coasts of Australia. Grows to a length of 6 inches.

#### SCORPENA CARDINALIS.

(Solander), Rich., Ann. Nat. Hist. 1842, ix, p. 212; Günth., Cat. ii, p. 116; Casteln., Proc. Linn. Soc. N. S. Wales iii, p. 378; Macleay, Aust. Cat. i, p. 131; Tenison-Woods, Fisheries of N. S. Wales, pl. 12.

*Hab.*—Coast of New South Wales, common. *Red Rock Cod* of Sydney fishermen, who confound it with *S. cruenta*. Attains to 8 inches in length. Of fair quality for the table.

#### GLYPTAUCHEN PANDURATUS.

*Apistus panduratus*, Rich., Proc. Zool. Soc. 1850, p. 58, pl. i, ff. 3, 4, and Ann. Nat. Hist. 1851, vii, p. 274; Günth., Cat. ii, p. 121; Macleay, Aust. Cat. i, p. 131.

*Hab.*—King George's Sound; Port Jackson. Grows to 8 inches in length.

#### PTEROIS VOLITANS.

*Gasterosteus volitans*, Linn., Syst. Nat. i, p. 491.

*Scorpæna volitans*, Bl., t. 184.

*Pterois volitans*, Cuv. & Val. iv, p. 352, pl. 88; Rüpp., N. W. Fische, p. 107; Günth., Cat. ii, p. 122, and Fische d. Sudsee, p. 81; Day, Fishes of India, p. 154, pl. 37, f. 1; All. & MacL., Proc. Linn. Soc. N. S. Wales i, p. 278; Macleay, Aust. Cat. i, p. 135, and Proc. Linn. Soc. N. S. Wales vii, p. 248.

*Hab.*—From the east coast of Africa, through all the Indian seas; north and east coasts of Australia. Attains a length of 5 inches.

#### PTEROIS ZEBRA.

Cuv. & Val. iv, p. 567; Quoy & Gaim., Voy. Uranie, p. 329, and Voy. Astrolabe Poiss., p. 692, pl. 11, f. 6; Günth., Cat. ii, p. 126, and Fische d. Sudsee, p. 82; Day, Fishes of India, p. 153; Bleek., Atl. Ichthyol. Scorp., pl. 1, f. 1; Macleay, Aust. Cat. i, p. 135.

*Hab.*—Indian and Malayan seas; Port Jackson. Grows to 8 inches at least.

## 54 CENTROPOGON AUSTRALIS.

*Cottus australis*, White, Voy. N. S. Wales, p. 266.

*Apistus australis*, Cuv. & Val. iv, p. 398.

*Centropogon australis*, Günth., Cat. ii, p. 128; Macleay, Aust. Cat. i, p. 136.

*Hab.*—Port Jackson, common; Richmond River. *Fortescue* of the colonists. Attains a length of 5 inches.

## CENTROPOGON ROBUSTUS.

Günth., Cat. ii, p. 128, and Ann. Nat. Hist. 1867, xx, p. 60; Krefft, Proc. Zool. Soc. 1864, p. 182; Macleay, Aust. Cat. i, p. 136, and Proc. Linn. Soc. N. S. Wales viii, p. 203; Tenison-Woods, Fisheries N. S. Wales, p. 48.

*Centropogon troschelii*, Steind., Sitzgsber. Ak. Wiss. Wien 1866, liii, p. 440, pl. 4, f. 1.

*Hab.*—Rivers of the eastern watershed of New South Wales; Cape York (Günther). *Bull-rout* of the colonists. Attains to a length of 7 inches.

## PENTAROGE MARMORATA.

*Apistus marmoratus*, Cuv. & Val. iv, p. 416.

*Pentaroge marmorata*, Günth., Cat. ii, p. 132; Steind., Sitzgsber. Ak. Wiss. Wien 1868, lvii, p. 981; Macleay, Aust. Cat. i, p. 139.

*Hab.*—Seas of Timor, Australia, and Tasmania; Port Jackson. Grows to the length of 8 inches.

## HAPLOACTIS MILESI.

*Aploactis milesii*, Rich., Proc. Zool. Soc. 1850, p. 60, pl. 1, ff. 1, 2, and Ann. Nat. Hist. 1851, vii, p. 275; Günth., Cat. ii, p. 142; Macleay, Aust. Cat. i, p. 140.

*Hab.*—King George's Sound; Port Jackson. Grows to the length of 6 inches.

## SYNANCEIA HORRIDA.

*Scorpaena horrida*, Linn. i, p. 453; Bl. t. 183.

*Synanceia horrida*, Bl. Schn., p. 194; Cuv. & Val. iv, p. 440.

*Synancidium horridum*, Müll., Akad. Wiss. 1844, p. 163; Günth., Cat. ii, p. 144, and Fische d. Sudsee, p. 83; Kner, Voy. Novara Fische, p. 119; Day, Fishes of India, p. 162, pl. 39, f. 3; Macleay, Aust. Cat. i, p. 142.

*Hab.*—Indian and Malayan seas; north coast of Australia; ? Port Jackson. Grows to 18 inches in length. Mr. Ramsay thinks it probable that the unique Port Jackson specimen of this fish in the Australian Museum collection came originally from the north, and has been accidentally labelled as from Port Jackson.

## NANDIDÆ.

## PLESIOPS BLEEKERI.

Günth., Cat. iii, p. 364, and Fische d. Sudsee, p. 87, pl. 58, f. 1; Macleay, Aust. Cat. i, p. 100.

*Hab.*—Port Jackson; Port Hacking. Grows to the length of 12 inches.

## TRACHINOPS TENIATUS.

Günth., Cat. iii, p. 366; Kner, Voy. Novara Fische, p. 215, pl. 8, f. 7; Macleay, Aust. Cat. i, p. 100.

*Hab.*—New South Wales coast. Length of specimen  $3\frac{1}{2}$  inches.

## RUEPELLIA PROLONGATA.

Casteln., Proc. Zool. Soc. Vict. ii, p. 51, and Res. Fishes Aust., p. 29.

*Hab.*—West Australia; Port Phillip; Port Jackson, (Castelnau). Grows to the length of a foot.

## TEUTHIDIDÆ.

## 162 TEUTHIS JAVA.

Linn., Syst. Nat. i, p. 507; Linn. Gmel. i, p. 1362; Günth., Cat. iii, p. 315; Day, Fishes of India, p. 165, pl. 39, f. 5; Casteln., Proc. Linn. Soc. N. S. Wales iii, p. 386; Macleay, Aust. Cat. i, p. 142. *Amphacanthus javus*, Cuv. & Val. x, p. 118; Kner, Voy. Novara Fische, p. 205.

*Hab.*—East Indian, Malayan, and Australian seas; Port Jackson. Attains a length of 6 inches. A good food fish.

## TEUTHIS NEBULOSA.

*Amphacanthus nebulosus*, Quoy & Gaim., Voy. Uranie Zool., p. 369; Cuv. & Val. x, p. 164.

— *maculosus*, Quoy & Gaim., l.c., p. 370.

— *olivaceus*, Cuv. & Val. x, p. 163.

— *gymnopareius*, Rich., Ann. Nat. Hist. 1843, xi, p. 174.

*Teuthis nebulosa*, Günth., Cat. iii, p. 321, & Study of Fishes, p. 419, f. 182; Playfair, Fishes of Zanz., p. 51, pl. 10, f. 3; Macleay, Aust. Cat. i, p. 144; Tenison-Woods, Fisheries of N. S. Wales, p. 50.

*Hab.*—From the east coast of Africa to Australia. *Black Trevally* of the Sydney market. Grows to the length of 6 inches. A fair breakfast fish.

## TEUTHIS HEXAGONATA.

*Amphacanthus hexagonatus*, Bleek., Kokos, p. 41; Kner, Voy. Novara Fische, p. 207.

*Teuthis hexagonata*, Günth., Cat. iii, p. 320.

*Hab.*—Java; Sumbawa; Kokos; Fiji Islands; Port Jackson (Kner). Attains a length of 6 inches.

## BERYCIFORMES.

## BERYCIDÆ.

## MONOCENTRIS JAPONICUS.

*Gasterosteus japonicus*, Houtt., Act. Soc. Harl. xx, pt. 2, p. 329.

*Sciæna cataphracta*, Thunb., Nov. Ac. Sc. Suec. xi, p. 102, t. 3.

*Monocentris carinata*, Bl. Schn., p. 100, t. 24.

*Lepisacanthus japonicus*, Lacep. iii, p. 321.

*Monocentris japonicus*, Cuv. & Val. iv, p. 461, pl. 97; Schleg., Faun. Japon. Poiss., p. 50, pl. 22, f. 1; Günth., Cat. i, p. 9, and Study of Fishes, p. 421, f. 183; Bleek., Atl. Ichthyol. Trachich., pl. 2, f. 4; Macleay, Aust. Cat. i, p. 145.

*Hab.*—Seas of Japan; Port Jackson and Port Stephens, very rare. Attains a length of 5 inches.

## TRACHICHTHYS AUSTRALIS.

Shaw, Nat. Misc., t. 378, & Zool. iv, p. 630; Cuv. & Val. iii, p. 299; Lowe, Fishes of Madeira, p. 55; Günth., Cat. i, p. 10; Casteln., Proc. Linn. Soc. N. S. Wales iii, p. 361; Macleay, Aust. Cat. i, p. 145; Ogilby, Proc. Linn. Soc. N. S. Wales x, (*in press*).

*Trachichthys jacksoniensis*, Macleay, Aust. Cat. i, p. 146.

*Hab.*—Coast of New South Wales. Grows to at least 6 inches in length.

## BERYX AFFINIS.

Günth., Cat. i, p. 13; Casteln., Proc. Linn. Soc. N. S. Wales ii, p. 225, & op. cit. iii, p. 365; Hector, Ann. Nat. Hist. 1877, (4) xix, p. 341; Macleay, Aust. Cat. i, p. 147; Tenison-Woods, Fisheries of N. S. Wales, p. 51, pl. 15.

*Hab.*—Coasts of New Zealand and New South Wales. *Nannygai* of the Sydney market. Grows to 20 inches long. In great estimation for the table.

## CYRTIFORMES.

## CYRTIDÆ.

## / 68 PEMPHERIS COMPRESSUS.

*Sparus compressus*, White, Voy. N. S. Wales, App., p. 267, f. 2; Günth., Cat. ii, p. 508; Casteln., Proc. Linn. Soc. N. S. Wales iii, p. 384; Macleay, Aust. Cat. i, p. 151.

*Hab.*—Swan River; Port Jackson, common. *Bullseye* of the fishermen. Grows to 6 inches in length.

## PEMPHERIS MACROLEPIS.

Macleay, Aust. Cat. i, p. 151.

*Hab.*—King George's Sound; Port Jackson. Attains a length of 10 inches.

## PEMPHERIS LINEATUS.

Ogilby, Proc. Linn. Soc. N. S. Wales x, p. 447.

*Hab.*—Port Jackson. Type specimen measures  $7\frac{1}{2}$  inches.

## POLYNEMIFORMES.

## POLYNEMIDÆ.

## POLYNEMUS INDICUS.

Shaw, Zool. v, p. 155; Günth., Cat. ii, p. 326; Kner, Voy. Novara Fische, p. 137, t. 7, f. 1 (*air-bladder*); Macleay, Aust. Cat. i, p. 153.

*Polynemus uronemus*, Cuv. & Val. iii, p. 385.

*Hab.*—Indian and Malayan seas; Port Jackson, (Günther & Castelnau). Grows to 4 feet in length. An excellent food fish.

## POLYNEMUS MACROCHIR.

Günth., Ann. Nat. Hist. 1867, (3) xx, p. 60; Macleay, Aust. Cat. i, p. 153.

*Hab.*—Port Jackson.

## SCLÆNIFORMES.

## SCLÆNIDÆ.

## SCLÆNA AQUILA.

*Cheilodipterus aquila*, Lacép. v, p. 685.

*Sciæna aquila*, Risso, Eur. Mér. iii, p. 411; Cuv. & Val. v, p. 28, pl. 100; Günth., Cat. ii, p. 291, and Fische d. Sudsee, p. 105; Day, Brit. Fishes i, p. 150, pl. 50.

— *hololepidota*, Cuv. & Val. v, p. 53; Quoy & Gaim., Voy. Astrolabe Poiss., p. 697, pl. 12, f. 1; Smith, Ill. S. Afr. Zool., Fishes pl. 15.

? — *antarctica* Casteln., Proc. Zool. Soc. Viet. i, p. 100, and Proc. Linn. Soc. N. S. Wales ii, p. 232, and op. cit. iii, p. 381; Macleay, Aust. Cat. i, p. 151; Tenison-Woods, Fisheries of N. S. Wales, p. 53, pl. 16.

? *Sciæna (Corvina) novæ-hollandiæ*, Steind., Sitzgsber. Ak. Wiss. Wien 1866, liii, p. 445, pl. 5, f. 2.

*Hab.*—Eastern shores of the Atlantic; Mediterranean; Cape Seas; south and east coasts of Australia; Port Jackson, common. *Jewfish* of Sydney; *Kingfish* of Melbourne; *Dewfish* of Brisbane. Attains a length of 6 feet. A good table fish.

OTOLITHUS <sup>V</sup>ATELODUS.

Günth., Ann. Nat. Hist. 1867, (3) xx, p. 60; Macleay, Aust. Cat. i, p. 156; Tenison-Woods, Fisheries of N. S. Wales, p. 54, pl. 17.

*Otolithus teraglin*, Macleay, Proc. Linn. Soc. N. S. Wales v, p. 48.

*Hab.*—Coast of New South Wales, abundant. *Teraglin* of the Sydney market. Grows to the length of 3 feet. An excellent food fish.

## XIPHIIFORMES.

## XIPHIIDÆ.

## 175 HISTIOPHORUS GLADIUS.

*Scomber gladius*, Brouss., Mem. Acad. Sc. 1786, p. 454, pl. x; Bloch, t. 345.

*Xiphias velifer*, Bl. Schn., p. 93.

*Istiophorus gladius*, Lacép. iii, pp. 374, 375.

*Histiophorus indicus*, Cuv. & Val. viii, p. 293, pl. 229.

— *americanus*, Cuv. & Val. viii, p. 303.

— *gladius*, Günth., Cat. ii, p. 513; Playfair, Proc. Zool. Soc. 1867, p. 856; Day, Fishes of India, p. 198; Ramsay, Proc. Linn. Soc. N. S. Wales v, p. 295, pl. 8; Macleay, Aust. Cat. i, p. 157; Tenison-Woods, Fisheries of N. S. Wales, p. 55.

*Hab.*—Seas between or near the tropics; coast of New South Wales. *Swordfish.* Grows to the length of 14 feet.

## TRICHIURIFORMES.

## TRICHIURIDÆ.

## TRICHIURUS HAUMELA.

*Clupea haumela*, Forsk., p. 72; Linn. Gmel., p. 1408.

*Trichiurus haumela*, Cuv. & Val. viii, p. 249; Rüpp., N. W. Fische, p. 41; Günth., Cat. ii, p. 348; Kner, Voy. Novara Fische, p. 140; Day, Fishes of India, p. 201; Macleay, Aust. Cat. i, p. 159.

*Hab.*—East African, Indian, Malayan and Chinese seas; New South Wales coast; Port Jackson and Newcastle. Grows to the length of 3 feet.

## COTTO-SCOMBIFORMES.

## ACANTHURIDÆ.

## PRIONURUS MICROLEPIDOTUS.

Lacép., Ann. Mus. iv, p. 205; Cuv. & Val. x, p. 295, pl. 292; Günth., Cat. i, p. 317; Macleay, Aust. Cat. i, p. 164.

*Hab.*—Port Jackson. Grows to 12 inches in length.

## CARANGIDÆ.

## CARANX TRACHURUS.

*Scomber trachurus*, Linn., Syst. Nat., p. 494; Bloch, t. 56.

*Caranx trachurus*, Lacép. iii, p. 60; Cuv. & Val. ix, p. 11, pl. 246; Gay, Hist. Chile, Zool. ii, p. 233; Rich., Ichthyol. China, p. 273, and Ann. Nat. Hist. 1843, xi, p. 25; Day, Brit. Fishes i, p. 124, pl. 44; Günth., Study of Fishes, p. 442.

— *var. japonicus*, Schleg., Faun. Japon. Poiss., p. 109, pl. 59, f. 1.

— *declivis*, Jenyns, Voy. Beagle Fishes, p. 68, pl. 14.

*Trachurus trachurus*, Casteln., Anim. Nouv., p. 23; Günth., Cat. ii, p. 419; Kner, Voy. Novara Fische, p. 150; Kner & Steind., Sitzgsber. Ak. Wiss. Wien liv, p. 364; Steind., op. cit. lvii, p. 382; Macleay, Aust. Cat. i, p. 166; McCoy, Prodr. Zool. Viet. dec. ii, pl. 18.

— *declivis*, Casteln., Proc. Linn. Soc. N. S. Wales iii, p. 383; Tenison-Woods, Fisheries of N. S. Wales, p. 58, pl. 18.

*Hab.*—All temperate seas; Port Jackson, common. *Yellow-tail* of Sydney. Attains a length of 16 inches. Of fair quality as food.

## CARANX NOBILIS.

Macleay, Aust. Cat. i, p. 167.

*Hab.*—Port Jackson. Length, 24 inches.

## CARANX GEORGIANUS.

Cuv. & Val. ix, p. 85; Jenyns, Voy. Beagle Fishes, p. 71; Rich., Ann. Nat. Hist. 1843, xi, p. 27, and Voy. Erebus & Terror Fishes, p. 135, pl. 58, ff. 1-3; Günth., Cat. ii, p. 440; All. & MacL., Proc. Linn. Soc. N. S. Wales i, p. 327; Macleay, op. cit. viii, p. 204, & Aust. Cat. i, p. 168.

*Hab.*—Coasts of Norfolk and Raoul Islands, New Zealand, & Australia; New South Wales, abundant. *White Trevally* of Port Jackson. Grows to 25 inches. A well-flavored fish.

## CARANX HIPPOS.

*Scomber hippos*, Linn., Syst. Nat. i, p. 494; Bl. Schn., p. 28.

*Caranx forsteri*, Cuv. & Val. ix, p. 107; Kner, Voy. Novara Fische, p. 158.

— *hippos*, Günth., Cat. ii, p. 449, and Fische d. Sudsee, p. 131, pl. 84, and Study of Fishes, f. 196 (l.l. plates); Day, Fishes of India, p. 216; All. & MacL., Proc. Linn. Soc. N. S. Wales i, p. 323; Macleay op. cit. ii, p. 355, and vii, p. 355, and Aust. Cat. i, p. 170.

— *paraspistes*, Rich., Voy. Erebus and Terror Fishes, p. 136, pl. 58, ff. 6, 7.

*Hab.*—Indian, Malayan, Chinese, and Australian seas. Port Jackson, scarce. Attains a length of 3 feet.

## CARANX CILIARIS.

*Zeus ciliaris*, Bl., t. 191; Linn. Gmel., p. 1223.

*Blepharis indicus*, Cuv. & Val. ix, p. 154; Schleg., Faun. Japon. Poiss., p. 113, pl. 60, f. 2; Rich., Ichthyol. China, p. 271.

— *fuscatus*, Rüpp., Atl. Fische, p. 129, pl. 33, f. 2.

*Caranx ciliaris*, Günth., Cat. ii, p. 454, and Fische d. Sudsee, p. 135, pl. 89; Day, Fishes of India, p. 224; Macleay, Aust. Cat. i, p. 172, and Proc. Linn. Soc. N. S. Wales vii, p. 356.

*Blepharis ciliaris*, Casteln., Proc. Linn. Soc. N. S. Wales iii, p. 383.

*Hab.*—From the Red Sea through the Indian and Malayan Seas to the north and east coasts of Australia; Port Jackson, scarce. Largest specimen in the Australian Museum, 6 inches.

Castelnau includes *Caranx macrostoma*, Bleek. in his list of Port Jackson fishes (Proc. Linn. Soc. N. S. Wales iii, p. 352), but as the species has not been obtained since his time, and he states that it is called "yellow-tail" at Sydney, there can be little doubt that his identification was erroneous.

SERIOLA <sup>V</sup>LALANDEI.

Cuv. & Val. ix, p. 208; Günth., Cat. ii, p. 463; Macleay, Aust. Cat. i, p. 174; Tenison-Woods, Fisheries of N. S. Wales, p. 59, pl. 19.

*Seriola aureo-vittata*, Schleg., Faun. Japon. Poiss., p. 115, pl. 62, f. 1.

*Hab.*—Brazilian coast; Cape seas; Japan; east coast of Australia; Port Jackson. *Kingfish* of the Sydney market. Attains the weight of 50 pounds. Of considerable commercial importance when cured.

## SERIOLA GRANDIS.

Casteln., Proc. Zool. Soc. Vict. i, p. 115; Macleay, Aust. Cat. i, p. 175.

*Hab.*—Coast of Victoria; Port Jackson (Castelnau). *Yellow-tail* of the Melbourne market.

## SERIOLA HIPPOS.

Günth., Ann. Nat. Hist. 1876, (4) xvii, p. 392; Macleay, Aust. Cat. i, p. 176; Tenison-Woods, Fisheries of N. S. Wales, p. 60.

*Seriola nigrofasciata*, Casteln., Proc. Linn. Soc. N. S. Wales iii, p. 352; Macleay, Aust. Cat. i, p. 174.

*Hab.*—Port Jackson; Botany Bay. *Samson-fish* of the Sydney fishermen.

I have examined the two fish identified by Count Castelnau as *Seriola nigrofasciata*, and find them to be young examples of this species.

## SERIOLA SIMPLEX.

Ramsay & Ogilby, Proc. Linn. Soc. N. S. Wales x, (*in press*).

*Hab.*—Port Jackson.

## SERIOLELLA BRAMA.

*Neptomenus brama*, Günth., Cat. ii, p. 390; Macleay, Aust. Cat. i, p. 177.

*Hab.*—New Zealand; Tasmania; Port Jackson, (Aust. Mus). Attains a length of 10 inches.

In the Hon. Wm. Macleay's museum is a specimen of the Victorian *Seriolella travale*, Casteln., labelled doubtfully from Port Jackson.

## NAUCRATES DUCTOR.

*Gasterosteus ductor*, Linn., Syst. Nat. i, p. 489.

*Scomber ductor*, Bl., t. 338; Linn. Gmel. i, p. 1324.

*Naucrates ductor*, Cuv. & Val. viii, p. 312, pl. 232; Günth., Cat. ii, p. 374, and Fische d. Sudsee, p. 137, and Study of Fishes, p. 444; Day, Fishes of India, p. 229, pl. 51A, f. 2, and Brit. Fishes i, p. 127, pl. 45; Lütken, Spol. Atlant., p. 600, pl. 3, ff. 14, 15; Macleay, Aust. Cat. i, p. 194.

— *indicus*, Cuv. and Val. viii, p. 326; Less., Voy. Coquille Poiss., p. 157, pl. 14; Rich., Icthyol. China, p. 269; Kner, Voy. Novara Fische, p. 145.

*Hab.*—Temperate and tropical seas; Port Jackson. *Pilot-fish*. Attains to a foot in length. Said to be dry but well-flavored in its flesh.

## CHORINEMUS SANCTI-PETRI.

Cuv. & Val. viii, p. 379, pl. 236; Günth., Cat. ii, pl. 473, and Fische d. Sudsee, p. 138; Day, Fishes of India, p. 230; Macleay, Aust. Cat., App. p. 24.

*Hab.*—From the east coast of Africa, through the Indian and Malayan seas to the east coast of Australia; Port Denison (Klunzinger); Port Jackson (Macleay). Grows to 20 inches long.

## TEMNODON SALTATOR.

*Gasterosteus saltatrix*, Linn., Syst. Nat. i, p. 491.

*Scomber saltator*, Bl. Schn., p. 35.

*Temnodon heptacanthus*, Quoy & Gaim., Voy. Freyc. Zool., p. 400, pl. 61, f. 2.

— *saltator*, Cuv. and Val. ix, p. 225, pl. 260; Dekay, N. York Faun. Fishes, p. 130, pl. 26, f. 81; Gay, Hist. Chile, Zool. ii, p. 244; Günth., Cat. ii, p. 479; Macleay, Aust. Cat. i, p. 179; Tenison-Woods, Fisheries of N. S. Wales, p. 60, pl. 20.

*Hab.*—Seas of the temperate and tropical regions of both hemispheres; Australian coasts, abundant. *Tailor* of Sydney; *Skip-jack* of Melbourne. Attains to a length of 30 inches. Of good quality for the table.

## TRACHYNOTUS OVATUS.

*Gasterosteus ovatus*, Linn., Syst. Nat. i, p. 490.

*Trachynotus ovatus*, Günth., Cat. ii, p. 481, and Fische d. Sudsee, p. 139; Steind., Sitzgsber. Ak. Wiss., Wien 1869, ix, p. 709; Kner, Voy. Novara Fische, p. 164; Day, Fishes of India, p. 234, pl. 51 B, f. 2; All. & Mael., Proc. Linn. Soc. N. S. Wales i, p. 330; Macleay, Aust. Cat. i p. 180, and Proc. Linn. Soc. N. S. Wales vii, p. 359.

— *kennedyi*, Steind., Sitzgsber. Ak. Wiss. Wien lxxii, p. 75, f. 9.

*Hab.*—Nearly all tropical and temperate seas; coasts of Australia; Port Jackson. Grows to the length of 20 inches. Of good quality when cured; dry and insipid when fresh, (Day).

## TRACHYNOTUS BAILLONI.

*Casiomorus bailloni*, Lacép. iii, p. 93, pl. 3, f. 1.

— *quadripunctatus*, Rüpp., Atl. Fische, p. 90, pl. 24, f. 1.

*Trachynotus bailloni*, Cuv. & Val. viii, p. 431; Günth., Cat. ii, p. 484, and Fische d. Sudsee, p. 139; Day, Fishes of India, p. 233, pl. 51 A, f. 4; All. & MacL., Proc. Linn. Soc. N. S. Wales i, p. 330; Macleay, Aust. Cat. i, p. 180, and Proc. Linn. Soc. N. S. Wales vii, p. 359.

*Hab.*—East African, Indian, Malayan, and Australian seas; Port Jackson. Grows to the length of 20 inches.

#### PSETTUS ARGENTEUS.

*Chætodon argenteus*, Linn., Ann. Acad. iv, p. 249; Bl. Schn., p. 230.

*Psettus rhombeus*, Cuv. & Val. vii, p. 245.

— *argenteus*, Rich., Voy. Erebus & Terror Fishes, p. 57, pl. 35, ff. 1-3; Günth., Cat. ii, p. 487, and Fische d. Sudsee, p. 140, and Study of Fishes, ff. 198, 199; Kner, Voy. Novara Fische, p. 164; Day, Fishes of India, p. 235, pl. 51B, f. 5; Casteln., Proc. Linn. Soc. N. S. Wales ii, p. 235; Macleay, op. cit. iv, p. 63, and viii, p. 266, and Aust. Cat. i, p. 181; Tenison-Woods, Fisheries of N. S. Wales, pl. 45.

*Hab.*—East African, Indian, Malayan, and Australian seas; Port Jackson. *Bat-fish* of the Sydney fishermen. Attains to the length of 8 inches.

#### PLATAX TEIRA.

*Chætodon teira*, Forsk., p. 60, t. 22; Bloch t. 199, f. 1; Gmel. Linn., p. 1265.

*Platax teira*, Cuv., Règne Anim.; Rüpp., Atl. Fische, p. 68; Cuv. & Val. vii, p. 226; Günth., Cat. ii, p. 492, & Fische d. Sudsee, p. 141; Day, Fishes of India, p. 235, pl. 51 B, f. 4; Macleay, Aust. Cat. i, p. 182.

— *vespertilio*, Schleg., Faun. Japon. Poiss., p. 83, pl. 43 (not Bloch).

*Hab.*—Indian, Malayan, and North Australian Seas; Lake Macquarie and Port Jackson (Aust. Mus.), rare. Attains a length of 20 inches. Said to be of excellent flavor.

#### CYTTIDÆ.

##### ZEUS AUSTRALIS.

Rich., Voy. Erebus & Terror Fishes, pp. 36, 138, pl. 25, f. 1; Casteln., Proc. Zool. Soc. Vict. i, p. 108; Macleay, Aust. Cat. i, p. 185; Tenison-Woods, Fisheries of N. S. Wales, p. 61, pl. 21.

*Hab.*—Australian coasts; Port Jackson, common. *Dory* or *John Dory*. Grows to 18 inches long. An excellent food fish.

#### CORYPHÆNIDÆ.

##### CORYPHENA HIPPURUS.

Linn., Syst. Nat., p. 446; Bl. t. 174; Cuv. & Val. ix, p. 278, pl. 266; Lowe, Trans. Zool. Soc. ii, p. 183, iii, p. 6, and Proc. Zool. Soc. 1839, p. 80; Günth., Cat. ii, p. 405; Steindl, Sitzgsber. Ak. Wiss. Wien 1868, p. 370.

*Coryphena japonica*, Schleg., Faun. Japon. Poiss., p. 120, pl. 64.

— *? punctulata*, Macleay, Aust. Cat. i, p. 187.

*Hab.*—Indian seas, to the Malay Archipelago and Japan; Botany Bay. Grows to 5 feet; our specimen measures 22 inches; it is, without doubt, a young fish of this species, which has been recorded from these seas so long ago as Dampier's time; *vide*, Voy. New Holland i, pl. 2, f. 7.

#### BRAMA RAI.

*Sparus raii*, Bloch, t. 273.

*Brama raii*, Bl. Schn., p. 99; Cuv. & Val. vii, p. 281, pl. 190; Lowe, Trans. Zool. Soc. iii, p. 8; Günth., Cat. ii, p. 408; Lütken, Spol. Atlant. 1880, p. 190, pl. iv, ff. 1, 2; Day, Brit. Fishes i, p. 114, pl. 41; Macleay, Aust. Cat. i, p. 188.

*Hab.*—Mediterranean and western shores of the Atlantic; Port Jackson, (Castelnau). Grows to the length of 30 inches. I doubt very much the propriety of keeping this species in the Australian catalogue solely on the authority of Count Castelnau, who has left neither specimen nor description, but merely a catalogue name (Proc. Linn. Soc. N. S. Wales iii, p. 252), and whose identifications were not always as careful as is advisable.

1105 *PSENES LEUCURUS.*

Jenyns, Voy. Beagle Zool., p. 73; Günth., Cat. ii, p. 495; Macleay, Aust. Cat. i, p. 183.

*Hab.*—Indian Ocean; Port Jackson, (Günther). Largest specimen, 2 inches.

## SCOMBRIDÆ.

## SCOMBER ANTARCTICUS.

Casteln., Proc. Zool. Soc. Vict. i, p. 106; Macleay, Aust. Cat. i, p. 190; Tenison-Woods, Fisheries of N. S. Wales, p. 62.

*Hab.*—South and east coasts of Australia. The *Southern Mackerel*. Attains to 10 inches in length. An excellent fish if eaten quite fresh. This is not the fish figured by McCoy (Prod. Zool. Vict. dec. iii, p. 43, pl. 28), as *Scomber pneumatophorus*, De la Roche, (as stated by Tenison-Woods and others) if Castelnau is right in stating that his species has *no* air-bladder. I have never seen an example of this mackerel, but it is difficult to make out any valid difference between it and *Scomber scombrus*, Linn., from the descriptions only.

## THYNNUS THUNNINA.

*Scomber quadripunctatus*, Geoffr., Descr. Eg. Poiss., t. 24, f. 3.

*Thynnus thunnina*, Cuv. & Val. viii, p. 104, pl. 212; Schleg., Faun. Japon. Poiss., p. 95, pl. 48; Günth. Cat. ii, p. 364, and Fische d. Sudsee, p. 150, pl. 95; Day, Fishes of India, p. 252, pl. 54, f. 6

— *brasiliensis*, Cuv. & Val. viii, p. 110.

— *affinis*, Cant., Cat. p. 106; Günth., Cat. ii, p. 363; Macleay, Aust. Cat. i, p. 191.

*Hab.*—Tropical parts of the Atlantic; Mediterranean, Indian, Malayan, and North Australian, seas; Port Jackson (Macleay). Grows to 2 feet in length.

## THYNNUS PELAMYS.

*Scomber pelamis*, Linn., Syst. Nat. i, p. 492.

*Thynnus pelamys*, Cuv. & Val. viii, p. 113, pl. 214; Schleg., Faun. Japon. Poiss., p. 96, pl. 49; Rich., Ichthyol. China, p. 267; Günth., Cat. ii, p. 364, and Fische d. Sudsee, p. 151, pl. 96; Day, Fishes of India, p. 252, and Brit. Fishes i, p. 100, pl. 37; Macleay, Aust. Cat. i, p. 191.

— *vagans*, Less., Voy. Coquille Zool. ii, p. 162, pl. 32.

*Hab.*—Warm parts of the Atlantic, Indian, and Pacific Oceans; east coast of Australia (Macleay); Port Jackson (Castelnau). The *Bonito*. Attains the length of 3 feet.

PELAMYS AUSTRALIS. 

Macleay, Aust. Cat. i, p. 192.

*Hab.*—Port Jackson (Macleay). This species should be critically compared with *Pelamys chilensis*, Cuv. & Val., to which it appears to bear a great resemblance.

## AUXIS RAMSAYI.

Casteln., Proc. Linn. Soc. N. S. Wales iii, p. 382.

*Hab.*—Port Jackson. *Horse-mackerel* of the Sydney market. Said to be a good food fish.

## CYBIVUM COMMERCIONII.

*Scomber commersonii*, Lacép. ii, p. 600, pl. 20, f. 1; Shaw, Zool. iv, p. 589, pl. 83.

*Cybium commersonii*, Cuv., Règne Anim.; Cuv. & Val. viii, p. 165; Rich., Ichthyol. China, p. 268; Günth., Cat. ii, p. 370; Day, Fishes of India, p. 255, pl. 56, f. 5; Macleay, Aust. Cat. i, p. 193, and Proc. Linn. Soc. N. S. Wales viii, p. 266.

*Hab.*—East African, Indian, Malayan, and Australian seas; Port Jackson. Grows to 4 feet in length.

## CYRNIUM GUTTATUM.

*Scomber guttatus*, Bl. Sehn. p. 23, f. 5.

*Cyriium guttatum*, Cuv. & Val. viii, p. 173; Rich., Ichthyol. China, p. 268 (pt.); Günth., Cat. ii, p. 371; Kner, Voy. Novara Fische, p. 143; Day, Fishes of India, p. 255, pls. 55, f. 1 (young), and 56, f. 4 (adult); Macleay, Aust. Cat. i, p. 194.

*Hab.*—Indian, Malayan, and Chinese seas; Port Jackson (Macleay). Grows to the length of 6 feet. Is good eating, and salts well. (Day).

## ELACATE NIGRA.

*Scomber niger*, Bl. t. 337.

*Elacate bivittata*, Cuv. & Val. viii, p. 338; Schleg., Faun. Japon. Poiss., p. 104, pl. 56; Rich., Ichthyol. China, p. 269.

— *nigra*, Günth., Cat. ii, p. 375; Day, Fishes of India, p. 256, pl. 55, f. 2; Casteln., Proc. Linn. Soc. N. S. Wales iii, p. 381; Macleay, Aust. Cat. i, p. 195.

*Hab.*—Warmer parts of the Atlantic; Indian Seas; Port Jackson, scarce. Grows to 5 feet long.

## ECHENEIS NAUCRATES.

*Echeneis neucrates*, Linn., Syst. Nat. i, p. 446; Bl. t. 171.

— *neucrates*, Lacép. iii, pp. 146 and 162, pl. 9, f. 2; Schleg., Faun. Japon. Poiss., p. 270, pl. 120, f. 1; Rich., Ichthyol. China, p. 203; Günth., Ann. Nat. Hist. 1860, (3) v, p. 395, and Cat. ii, p. 384; Kner, Voy. Novara Fische, p. 146; Day, Fishes of India, p. 257, pl. 57, f. 1; All. & MacL., Proc. Linn. Soc. N. S. Wales i, p. 321; Casteln., op. cit. ii, p. 234, and iii, p. 382; Macleay, op. cit. viii, p. 266, and Aust. Cat. i, p. 196.

— *australis*, Griff., Cuv. An. Kingd. Fishes, p. 504.

*Hab.*—All tropical and temperate seas; Port Jackson (Krefft); Clarence River, (Ogilby), from Mr. T. Temperley; four specimens adhering to a *Zygæna leeuwini*. The Great Sucking-fish. Attains to 3 feet in length.

## ECHENEIS REMORA.

Linn., Syst. Nat. i, p. 446; Bl. t. 172; Schleg., Faun. Japon. Poiss., p. 271; Jenyns, Voy. Beagle Zool., p. 142; Günth., Ann. Nat. Hist. 1860, (3) v, p. 390, and Cat. ii, p. 378, and Fische d. Sudsee, p. 156; Kner, Voy. Novara Fische, p. 146; Day, Fishes of India, p. 258, and Brit. Fishes i, p. 108, pl. 39, f. 2; Macleay, Aust. Cat. i, p. 196.

*Hab.*—Seas of the temperate and tropical regions; Port Jackson, (Krefft & Castelnau). There are in the Australian Museum three specimens which I took off a shark caught in lat.  $6^{\circ} 50' S.$ , long  $76^{\circ} 0' E.$  (Ogilby). The common Sucking-fish or Remora. Grows to a foot in length.

## TRACHINIDÆ.

## LEPTOSCOPUS MACROPYGUS.

*Uranoscopus macropygus*, Rich., Voy. Erebus and Terror Fishes, p. 55, pl. 33, ff. 4, 6.

*Leptoscopus macropygus*, Gill, Proc. Ac. Nat. Sc. Philad. 1859, p. 133; Günth., Cat. ii, p. 232, and Study of Fishes, f. 206; Macleay, Aust. Cat. i, p. 198; Hutton, Trans. N. Zeal. Inst. vi, p. 106, and viii, p. 212.

— *huttoni*, Haast, Trans. N. Zeal. Inst. v, p. 275.

*Hab.*—Port Jackson. Grows to the length of 2 feet.

## PERCIS NOVÆ-CAMBRIÆ.

Ogilby, Proc. Linn. Soc. N. S. Wales x, p. 228.

*Hab.*—Port Jackson. Largest specimen  $7\frac{1}{2}$  inches.

This species has been confounded by Australian naturalists with the *Percis nebulosa* of Quoy and Gaimard, from which, however, it is very distinct.

## 211 PERCIS COXII.

Ramsay, Proc. Linn. Soc. N. S. Wales viii, p. 179.

*Hab.*—Port Jackson. Type specimen measures nearly 7 inches.

## PERCIS ALLPORTI.

Günth., Ann. Nat. Hist. 1876, (4) xvii, p. 394, and Voy. Challenger Shore Fishes, p. 28; Macleay, Aust. Cat. i, p. 199.

*Hab.*—Tasmania; Bass's Straits; Twofold Bay. Specimens measure 11 inches.

Count Castelnau includes *Aphritis urvillii*, Cuv. and Val. in his Port Jackson list (Proc. Linn. Soc. N. S. Wales iii, p. 351), but gives no evidence to prove that it has ever occurred so far north.

## SILLAGO MACULATA.

Quoy. & Gaim., Voy. Freyc. Zool., p. 261, pl. 53, f. 2; Cuv. & Val. iii, p. 411; Günth., Cat. ii, p. 245; Kner, Voy. Novara Fische, p. 127; Day, Fishes of India, p. 265, pl. 58, f. 4; Bleek., Atl. Ichthyol., pl. 389, f. 5; All. & MacL., Proc. Linn. Soc. N. S. Wales i, p. 279; Casteln., op. cit. iii, p. 380; Macleay, Aust. Cat. i, p. 201; Tenison-Woods, Fisheries of N. S. Wales, pl. 23.

*Hab.*—From the Malay Archipelago to South-east Australia; Port Jackson, abundant. *Whiting* or *Sand Whiting* of Sydney. Grows to about a foot long. An excellent food fish.

## SILLAGO BASSENSIS.

Cuv. & Val. iii, p. 412; Quoy. & Gaim., Voy. Astrolabe Poiss., p. 672, pl. 1, f. 2; Casteln., Proc. Linn. Soc. N. S. Wales iii, p. 380; Macleay, Aust. Cat. i, p. 202; Tenison-Woods, Fisheries of N. S. Wales, p. 65.

*Sillago ciliata*, Günth., Cat. ii, p. 245.

— *terræ-reginæ*, Casteln., Proc. Linn. Soc. N. S. Wales ii, p. 232.

*Hab.*—Australian coasts; Port Jackson, common. *Trumpeter Whiting* at Sydney. Attains to 15 inches in length. A good table fish.

## SILLAGO CILIATA.

Cuv. and Val. iii, p. 415; Casteln., Proc. Zool. Soc. Viet. ii, p. 113; Macleay, Aust. Cat. i, p. 202; Kner, Voy. Novara Fische, p. 127; All. & Macleay, Proc. Linn. Soc. N. S. Wales i, p. 279; Tenison-Woods, Fisheries of N. S. Wales, pl. 24.

*Hab.*—North coast of Australia; Port Jackson, scarce.

## BOVICHTHYS VARIEGATUS.

Rich., Voy. Erebus & Terror Fishes, p. 56, pl. 34, ff. 1-4; Günth., Cat. ii, p. 250, and Study of Fishes, f. 207; Hutton, Trans. N. Zeal. Inst. v, p. 262; Macleay, Aust. Cat. i, p. 203.

*Hab.*—New Zealand; Port Jackson. Specimen measures 8 inches.

## OPISTHOGNATHUS JACKSONIENSIS.

Macleay, Aust. Cat. i, p. 205.

*Hab.*—Port Jackson. Attains to 10 inches long.

## BATRACHIIDÆ.

## BATRACHUS DUBIUS.

*Lophius dubius*, White, Voy. N. S. Wales, p. 265.

*Batrachus dubius*, Rich., Voy. Erebus & Terror Fishes, p. 16, pl. 10; Günth., Cat. iii, p. 169; All. & MacL., Proc. Linn. Soc. N. S. Wales i, p. 335; Macleay, op. cit. viii, p. 267, & Aust. Cat. i, p. 207.

*Hab.*—South coast of New Guinea; Australian coasts; Port Jackson, common. Grows to 6 inches in length.

## 219 BATRACHUS GRUNNIENS.

*Cottus grunniens*, var. B., Linn. Gracel., Syst. Nat. i, p. 1209.

*Batrachus grunniens*, Bl. Schn., p. 43; Cuv. & Val. xii, p. 466; Steind., Sitzgsber. Ak. Wiss. Wien ix, 1870, p. 564; Day, Fishes of India, p. 269, pl. 59, f. 1.

— *trispinosus*, Günth., Cat. iii, p. 169; Kner, Voy. Novara Fische, p. 189.

? — *dussumieri*, Cuv. & Val. xii, p. 474, pl. 367; Günth., Cat. iii, p. 169; All. & MacL., Proc. Linn. Soc. N. S. Wales i, p. 335; Macleay, Aust. Cat. i, p. 208.

*Hab.*—Indian and Malayan seas; Sydney (Kner). Grows to 7 inches in length.

## PEDICULATI.

## BRACHIONICHTHYS HIRSUTUS.

*Lophius hirsutus*, Lacép., Ann. Mus. iv, p. 202, pl. 55, f. 3.

*Chironectes hirsutus*, Cuv. & Val. xii, p. 434.

*Brachionichthys hirsutus*, Bleek., Nat. Tyd. Ned. Ind. vii, 1854, p. 121; Günth., Cat. iii, p. 182; Macleay, Aust. Cat. i, p. 210; Günth., Voy. Challenger Shore Fishes, p. 28.

*Hab.*—Tasmania; Twofold Bay (Günther).

## ANTENNARIUS MARMORATUS.

*Lophius histrio*, var. *marmoratus*, Bl. Schn., p. 142.

*Chironectes marmoratus*, Less., Voy. Coquille Zool. ii, p. 145, Poiss. pl. 16, f. 2; Cuv. & Val. xii, p. 402; Schleg., Faun. Japon. Poiss., p. 159, pl. 81, f. 1.

— *pictus* var. *vittatus*, Rich., Voy. Erebus and Terror p. 15, pl. 9, ff. 3, 4.

*Antennarius marmoratus*, Günth., Cat. iii, p. 185, and Fische d. Sudsee, p. 162, t. 100, f. A.; Bleek., Atl. Ichthyol. v, p. 23, t. 198, f. 4, and t. 199, f. 1; Kner, Voy. Novara Fische, p. 192; Day, Fishes of India, p. 272; Macleay, Aust. Cat. i, p. 211.

*Hab.*—East African, Indian, Malayan, and Australian seas; Port Jackson. *Frog-fish* or *Angler* of Sydney. Grows to 5 inches in length.

## ANTENNARIUS STRIATUS.

*Lophius striatus*, Shaw, Nat. Misc. v, pl. 175, and Zool. v, p. 385.

*Antennarius striatus*, Günth., Fische d. Sudsee, p. 162, pl. 99, f. B; Macleay, Aust. Cat. i, p. 212.

*Hab.*—Sandwich and Solomon Islands; Mauritius; Australian coasts; Port Jackson, common. *Frog-fish* and *Angler* at Sydney. Grows to 7 inches in length.

## ANTENNARIUS PINNICEPS.

(Commerson), Cuv. and Val. xii, p. 410; Günth., Cat. iii, p. 190, and Ann. Nat. Hist. 1867, (3) xx, p. 61; Steind., Sitzgsber. Ak. Wiss. Wien 1866, liii, p. 457, (var.); Macleay, Aust. Cat. i, p. 212.

*Chironectes tridens*, Schleg., Faun. Japon. Poiss. (part) pl. 81, f. 4.

*Hab.*—Indian Ocean; Sydney (Günther).

## ANTENNARIUS NUMMIFER.

*Chironectes nummifer*, Cuv., Mém. Mus. iii, p. 430, pl. 17, f. 4; Cuv. and Val. xii, p. 425; Rüpp., N. W. Fische, p. 141.

*Antennarius nummifer*, Günth., Cat. iii, p. 195, and Fische d. Sudsee, p. 164; Klunz., Fische d. Roth. Meer., p. 499; Bleek., Atl. Ichthyol. v, p. 18, t. 198, f. 2; Day, Fishes of India, p. 272, pl. 59, f. 2.

*Chironectes coccineus*, Less. & Garn., Voy. Coquille Poiss., p. 143, pl. 16, f. 1; Cuv. & Val. xii, p. 430; Günth., Cat. iii, p. 191; Macleay, Aust. Cat. i, p. 213.

*Hab.*—East African, Indian, Malayan, and South Seas; Port Jackson (Macleay). Grows to 6 inches long.

## 225 ANTENNARIUS COMMERSONII.

*Lophius commersonii*, Lacép. i, p. 327.

*Chironectes commersonii*, Cuv. & Val. xii, p. 426.

*Antennarius commersonii*, Cant., Cat., p. 204; Günth., Cat. iii, p. 192, and Fische d. Sudsee, p. 163, pls. 100-106; Macleay, Aust. Cat. i, p. 213.

*Hab.*—Indian Ocean; South Seas; Port Jackson, (Krefft).

## COTTIDÆ.

## PLATYCEPHALUS ARENARIUS.

Ramsay & Ogilby, Proc. Linn. Soc. N. S. Wales x, (*in press*).

*Hab.*—Coasts of New South Wales, common. *Sand Flathead* of the Sydney market. Grows to the length of 15 inches. A well-flavored fish.

## PLATYCEPHALUS BASSENSIS.

Cuv. & Val. iv, p. 247; Quoy & Gaim., Voy. Astrolabe Poiss., p. 683, pl. 10, f. 3; Casteln., Proc. Linn. Soc. N. S. Wales iii, p. 379; Macleay, Aust. Cat. i, p. 216.

*Platycephalus tasmaniensis*, Rich., Trans. Zool. Soc. iii, p. 97, and Voy. Erebus and Terror Fishes, p. 23, pl. 18, ff. 1, 2; Günth., Cat. ii, p. 179.

*Hab.*—Coasts of Tasmania, Victoria, and New South Wales; Port Jackson, common. Grows to 18 inches long.

## PLATYCEPHALUS FUSCUS.

Cuv. & Val. iv, p. 241; Casteln., Proc. Linn. Soc. N. S. Wales iii, p. 379; Sauv., N. Arch. Mus. (2) i, p. 150; Macleay, Aust. Cat. i, p. 217; Tenison-Woods, Fisheries of N. S. Wales, p. 67, pl. 25.

*Hab.*—Port Jackson; Port Phillip; Maryborough (Ogilby). *Flathead* of the Sydney market. Attains to a length of 3 feet. One of the best food fishes of the Colony.

## PLATYCEPHALUS LEVIGATUS.

Cuv. & Val. iv, p. 248; Quoy & Gaim., Voy. Astrolabe Poiss., p. 684, pl. 10, f. 4; Günth. Cat. ii, p. 179; Casteln., Proc. Zool. Soc. Vict. i, p. 84; Macleay, Aust. Cat. ii, p. 217.

*Hab.*—South and west coasts of Australia; Port Jackson (Krefft). *Rock Flathead* at Melbourne. Grows to the length of 20 inches. An excellent fish for the table.

## PLATYCEPHALUS CIRRONASUS.

Rich., Voy. Erebus and Terror Fishes, p. 114, pl. 51, ff. 7-10; Günth., Cat. ii, p. 186, and Study of Fishes, ff. 212, 213; Macleay, Aust. Cat. i, p. 221.

*Hab.*—Botany Bay; Port Jackson. Grows to 15 inches in length.

## PLATYCEPHALUS LONGISPINIS.

Macleay, Proc. Linn. Soc. N. S. Wales ix, p. 170.

*Hab.*—Outside Port Jackson, in 50 fathoms. Length of specimen, 10 inches.

## PLATYCEPHALUS MACRODON.

Ogilby, Proc. Linn. Soc. N. S. Wales x, p. 226.

*Hab.*—Port Jackson. Length of specimen rather over 13 inches.

## LEPIDOTRIGLA PAPILIO.

*Trigla papilio*, Cuv. and Val. iv, p. 80, pl. 73.

*Lepidotrigla papilio*, Günth., Cat. ii, p. 197; Sauv., N. Arch. Mus. (2) i, p. 155; Macleay, Aust. Cat. i, p. 223.

*Hab.*—Indian Ocean; Port Jackson, common. *Butterfly Gurnard* at Sydney. Grows to 5 inches long.

234 LEPIDOTRIGLA MULHALLI.

Macleay, Proc. Linn. Soc. N. S. Wales viii, p. 460.

*Hab.*—Outside Port Jackson, in 40 fathoms, common. Grows to 9 inches in length.

LEPIDOTRIGLA PLEURACANTHICA.

*Trigla pleuracanthica*, Rich., Voy. Erebus and Terror Fishes, p. 23, pl. 16, ff. 1-4; Günth., Cat. ii, p. 202, and Study of Fishes, ff. 214, 215; Macleay, Aust. Cat. i, p. 225.

*Lepidotrigla pleuracanthica*, Ramsay & Ogilby, Proc. Linn. Soc. N. S. Wales x, (*in press*).

*Hab.*—Port Jackson, scarce. Specimen measures 6½ inches.

TRIGLA KUMU.

Less. & Garn., Voy. Coquille Poiss., pl. 19; Cuv. & Val. iv, p. 50; Jenyns, Voy. Beagle Fishes, p. 27; Schleg., Faun. Japon. Poiss., p. 37, pl. 14 A, f. 3; Günth., Cat. ii, p. 204; Kner, Voy. Novara Fische, p. 124, t. 6, f. 2 (*air-bladder*), and Sitzgsber, Ak. Wiss Wien lviii, p. 318; McCoy, Prodr. Zool. Vict. dec. i, pl. 5; Casteln., Proc. Linn. Soc. N. S. Wales iii, p. 380; Macleay, Aust. Cat. i, p. 225; Tenison-Woods, Fisheries of N. S. Wales, p. 68, pl. 26.

*Hab.*—From the Cape seas to those of Japan and New Zealand; Port Jackson, common. Attains a length of 12 inches. A good fish for the table.

TRIGLA POLYOMMATA.

Rich., Proc. Zool. Soc. 1839, p. 96, and Trans. Zool. Soc. iii, p. 87, pl. 5, f. 2; Günth., Cat. ii, p. 204; Macleay, Aust. Cat. i, p. 226.

*Hoplonotus polyommatus*, Guich., Ann. Soc. Linn. Maine-et-Loire ix, Ichthyol.

*Hab.*—Coasts of South and West Australia; Tasmania; Port Jackson. *Flying Gurnard* of the fishermen. Grows to 15 inches long.

CATAPHRACTI.

DACTYLOPTERUS ORIENTALIS.

Cuv. and Val. iv, p. 134, pl. 76; Rich., Ichthyol. China, p. 218; Schleg., Faun. Japon. Poiss., p. 37, pl. 15A; Günth., Cat. ii, p. 222, Proc. Zool. Soc. 1871, p. 663, and Fische d. Sudsee, p. 169; Day, Fishes of India, p. 279, pl. 60, f. 6; Macleay, Aust. Cat. i, p. 227.

*Dactylopterus japonicus*, Bleek., Japan, p. 396.

— *chiropterus*, Bleek., Nat. Tyds. Ned. Ind. 1854, iv, p. 494; Günth., Cat. ii, p. 223 (*young*).

*Hab.*—Indian, Malayan, Japanese, Australian, and South Seas; Port Jackson. Grows to a foot in length.

PEGASIDÆ.

PEGASUS DRACONIS.

Linn., Syst Nat. i, p. 418; Bl., t. 109, ff. 1, 2; Günth., Cat. viii, p. 147; Day, Fishes of India, p. 280, pl. 61, f. 1.

*Pegasus volans*, Lacép. ii, p. 83 (*not Linné*).

— *draco*, Swains., Fishes ii, p. 332; Günth., Fishes of Zanz., p. 138.

*Hab.*—Indian and Malayan seas; Port Jackson. Specimen measures 2 inches.

The single specimen from Port Jackson in the Australian Museum agrees pretty well with the species to which I have referred it, except that it has only eight pectoral rays; should further examination disclose other differences sufficient to authorize its specific separation, I would propose *pauciradiatus* as a suitable name.

## GOBIIFORMES.

## GOBIIDÆ.

## 221) GOBIUS ALBOPUNCTATUS.

Cuv. & Val. xii, p. 57; Günth., Cat. iii, p. 25, Fische d. Sudsee, p. 172, pl. 110, f. A., and Voy. Challenger Shore Fishes, p. 28; Kner, Voy. Novara Fische, p. 174; Day, Fishes of India, p. 294, pl. 63, f. 7; Macleay, Proc. Linn. Soc. N. S. Wales ii, p. 357, and Aust. Cat. i, p. 230.

*Gobius nebulopunctatus*, Rüpp., N. W. Fische, p. 139; Cuv. & Val. xii, p. 58.

— *punctillatus*, Rüpp., Atl. Fische, p. 138, and N. W. Fische, p. 138.

— *padangensis*, Bleek, Blenn. en Gob., p. 249.

*Hab.*—From the Red Sea, through the Indian and Malayan Seas to the Fiji and Sandwich Islands; north and east coasts of Australia; Port Jackson (Günther). Length, 4 inches.

## GOBIUS BREVIFILIS.

*Gobius caninus*, Steind., Sitzgsber. Ak. Wiss. Wien 1867, lvi, p. 313 (*not Cuv. or Günth.*).

— *brevifilis*, Day, Proc. Zool. Soc. 1867, p. 910.

?— *krefltii*, Steind., Verh. z. b. Ges. Wien 1867, p. 326.

*Hab.*—Indian and Malayan Seas; Port Jackson (Günther). Length, 4 inches.

## GOBIUS FRENATUS.

Günth., Cat. iii, p. 39; Kner, Voy. Novara Fische, p. 174; Macleay, Aust. Cat. i, p. 231.

*Hab.*—Port Jackson (Kner). Length, 4 inches.

## GOBIUS BIFRENATUS.

Kner, Voy. Novara Fische, p. 177, t. 7, f. 3; Klunz., Sitzgsber. Ak. Wiss. Wien lxxx, Abth. i, p. 383; Macleay, Aust. Cat. i, p. 232.

*Gobius bassensis*, Casteln., Proc. Zool. Soc. Vict. i, p. 123.

*Hab.*—Coasts of Victoria and New South Wales; Port Jackson. Length, 5 inches.

## GOBIUS SEMIFRENATUS.

Macleay, Aust. Cat. i, p. 233.

*Hab.*—Port Jackson.

## GOBIUS BUCCATUS.

Cuv. & Val. xii, p. 60; Günth., Cat. iii, p. 14; Macleay, Aust. Cat. i, p. 236.

*Hab.*—Port Jackson (Macleay).

## GOBIUS FLAVIDUS.

Macleay, Aust. Cat. i, p. 237.

*Hab.*—Port Jackson. Length,  $1\frac{1}{2}$  in.

## GOBIUS DEPRESSUS.

Ramsay & Ogilby. Proc. Linn. Soc. N.S. Wales xi, (*in press*).

*Hab.*—Port Jackson. Length, 3·25 inches.

## GOBIUS GOBIOIDES.

*Gobius cristatus*, Macleay, Aust. Cat. i, p. 245 (*not Day*).

*Hab.*—Port Jackson, abundant (Macleay); Richmond River, common (Ogilby); numerous examples have been brought from the latter locality to the Australian Museum by Mr. T. Temperley. Length, 5 inches.

The name *cristatus* having been given to an Indian Goby by Dr. Day in 1873 (*z. Fishes of India*, p. 291), it became necessary to change the name of the Australian fish; and in giving it the above specific name I have been guided by its very strong dentition and the obliquity of its mouth, which gives it a strong outward resemblance to the fishes of that genus.

## ELEOTRIS MOGURNDA.

Rich., Voy. Erebus & Terror Fishes, p. 4, pl. 2, ff. 1, 2; Günth., Cat. iii, p. 3; Macleay, Aust. Cat. i, p. 252.

*Hab.*—Port Essington; Clarence River (Aust. Mus.) Length, 4 inches.

## ELEOTRIS AUSTRALIS.

Krefft, Proc. Zool. Soc. 1864, p. 183; Casteln., Proc. Liun. Soc. N.S. Wales iii, p. 384; Macleay, Aust. Cat. i, p. 252.

*Hab.*—Rivers and creeks of the eastern watershed of New South Wales. Length, 4 inches.

## ELEOTRIS COXII.

Krefft, Proc. Zool. Soc. 1864, p. 183; Macleay, Aust. Cat. i, p. 253.

*Hab.*—Rivers of the eastern watershed of New South Wales. *Gudgeon* of the colonists. Length, 5 inches.

## ELEOTRIS GRANDICEPS.

Krefft, Proc. Zool. Soc. 1864, p. 183; Macleay, Aust. Cat. i, p. 253.

*Hab.*—Eastern rivers of New South Wales. Length, 3 inches.

## ELEOTRIS GYMNOCEPHALUS.

Steind., Sitzgsber. Ak. Wiss. Wien 1866, liii, p. 453, pl. 2, f. 3; Günth., Ann. Nat. Hist. 1867, (3) xx, p. 62.

*Hab.*—Hawkesbury River (Günther, Krefft).

## ELEOTRIS COMPRESSA.

Krefft, Proc. Zool. Soc. 1864, p. 184; Bleek., Arch. Néerl. x, p. 147; Macleay, Aust. Cat. i, p. 254.

*Eleotris brevirostris*, Steind.

*Hab.*—Port Denison; Clarence River. Length, 3½ inches.

## ELEOTRIS OXYCEPHALA.

Schleg., Faun. Japon. Poiss., p. 150, pl. 77, ff. 4, 5; Günth., Cat. iii, p. 115; Kner., Voy. Novara Fische, p. 185; Macleay, Aust. Cat. i, p. 257.

*Eleotris cantherius*, Rich., Ichthyol. China, p. 209.

*Hab.*—Chinese and Japanese seas; Port Jackson (Kner). Length, 6 inches.

## ELEOTRIS MASTERSII.

Macleay, Aust. Cat. i, p. 257.

*Hab.*—Rope's Creek (Macleay).

## ELEOTRIS STRIATA.

*Eleotris striatus*, Steind., Sitzgsber. Ak. Wiss. Wien 1866, liii, p. 452.

*Hab.*—New South Wales.

## ELEOTRIS RICHARDSONII.

Steind., Sitzgsber. Ak. Wiss. Wien 1866, liii, p. 455.

*Hab.*—New South Wales.

## GOBIOIDES PURPURASCENS.

*Leme purpurascens*, De Vis, Proc. Linn. Soc. N.S. Wales ix, p. 698.

*Hab.*—Brisbane River (De Vis); Clarence River (Ogilby). Length, 7 inches.

The Australian Museum possesses a single specimen of a fish which was found by Mr. T. Temperley buried in mud on the bank of the Clarence River near its mouth. Having been dried before being placed in spirits it is impossible now to describe it, and as it appears to agree fairly well with De Vis's species, I have placed it provisionally under that heading, until an opportunity shall occur of comparing it with his type. I am unable to find sufficient differences to warrant the separation of *Leme* from *Gobioides*.

## 250 ARISTEUS FLUVIATILIS.

Casteln., Proc. Linn. Soc. N.S. Wales iii, p. 141.

*Hab.*—Murrumbidgee River; Rope's Creek. Length, 3½ inches.

## ARISTEUS LINEATUS.

Macleay, Aust. Cat. i, p. 261.

*Hab.*—Richmond River. Length, 3 inches.

## CALLIONYMIDÆ.

## CALLIONYMUS CALAUROPOMUS.

Rich., Voy. Erebus and Terror Fishes, p. 10, pl. 7, ff. 4, 5; Günth., Cat. iii, p. 147; Macleay, Aust. Cat. i, p. 262.

*Hab.*—Coasts of Australia; Port Jackson, common. Length, 11 inches.

## CALLIONYMUS PAPILIO.

Günth., Ann. Nat. Hist. 1864, (3) xiv, p. 197; Macleay, Aust. Cat. i, p. 262.

*Callionymus ocellifer*, Casteln., Proc. Zool. Soc. Vict. ii, p. 49.

*Hab.*—Melbourne (Günther); Port Jackson (Aust. Mus.). Length, 5 inches.

## CALLIONYMUS CURVICORNIS.

Cuv. & Val. xii, p. 298; Günth., Cat. iii, p. 145.

*Callionymus japonicus*, Cuv. & Val. xii, p. 299 (*not Houtt.*)

— *valenciennesii*, Schleg., Faun. Japon. Poiss., p. 153, pl. 78, f. 3.

— *punctatus* (Langsd.), Rich., Ichthyol. China, p. 210.

— *calcaratus*, Macleay, Aust. Cat. i, p. 263; Ogilby, Proc. Linn. Soc. N. S. Wales x, p. 121.

*Hab.*—Chinese and Japanese seas; Port Jackson. Length, 9 inches.

## CALLIONYMUS MACLEAYI.

*Callionymus lateralis*, Macleay, Aust. Cat. i, p. 263 (*not Richardson*).

*Hab.*—Port Jackson. Length, under 3 inches.

Richardson having previously called an Indian fish *lateralis*, I have much pleasure in naming the present species after its discoverer.

## CALLIONYMUS LUNATUS.

Schleg., Faun. Japon. Poiss., p. 155, pl. 78, f. 4; Günth., Cat. iii, p. 146, and Voy. Challenger Shore Fishes, pp. 28 and 67; Macleay, Aust. Cat. App., p. 35.

*Hab.*—Japanese seas; Port Jackson (Günther). Length, 8 inches.

## CALLIONYMUS PHASIS.

Günth., Voy. Challenger Shore Fishes, p. 28, pl. 15, f. C; Macleay, Aust. Cat. App., p. 35.

*Hab.*—Twofold Bay, 120 fathoms. Length, 4 inches.

## BLENNIIFORMES.

## TRICHONOTIDÆ.

## HEMEROCETES HASWELLI.

Ramsay, Proc. Linn. Soc. N. S. Wales vi, p. 575.

*Hab.*—North Head, Port Jackson, in 10 fathoms. Length, 2½ inches.

## BLENNIIDÆ.

## 269 BLENNIUS TASMANIANUS.

Rich., Trans. Zool. Soc. iii, p. 129; Günth., Cat. iii, p. 214; Macleay, Aust. Cat. ii, p. 3; Günth., Voy. Challenger Shore Fishes, p. 28.

*Hab.*—Tasmania; Port Jackson (Günther). *Lempriere's Blenny.* Length, 5 inches.

## BLENNIUS UNICORNIS.

Casteln., Proc. Linn. Soc. N. S. Wales iii, p. 384.

*Hab.*—Port Jackson. Length, 2 inches. Said to feed upon the living oysters.

## BLENNIUS CASTANEUS.

Macleay, Aust. Cat. ii, p. 5.

*Hab.*—Port Jackson (Mael. Mus.)

## PETROSCIRTES VARIABILIS.

Cant., Cat., p. 200; Günth., Cat. iii, p. 234; Day, Fishes of India, p. 327, pl. 69, f. 7; Macleay, Aust. Cat. ii, p. 6.

*Hab.*—Coasts of India and the Malay Archipelago; Port Jackson (Günther). Length, 4 inches.

## PETROSCIRTES ANOLIS.

*Blennechis anolius*, Cuv. & Val. xi, p. 288.

*Petroscirtes anolis*, Günth., Cat. iii, p. 238; Macleay, Aust. Cat. ii, p. 6.

*Hab.*—Port Jackson. Length, 2 inches.

## PETROSCIRTES SOLORENSIS.

Bleek., Solor, p. 81; Günth., Cat. iii, p. 235; Kner, Voy. Novara Fische, p. 196; Macleay, Aust. Cat. ii, p. 7.

*Hab.*—Sea of Lawajong; Sydney (Kner).

## PETROSCIRTES MACLEAYI.

*Petroscirtes fasciolatus*, Macleay, Aust. Cat. ii, p. 8 (not Ehrenb. or Cuv. and Val.)

*Hab.*—Port Jackson. Length, 3 inches.

Cuv. & Val. having given the specific name of *fasciolatus* to a *Petroscirtes* (*Blennechis*) from the Red Sea, I am reluctantly obliged to re-name our Port Jackson species, but in doing so I take the opportunity of calling it after the talented author of the Descriptive Catalogue of Australian Fishes, in which work it is first differentiated.

## PETROSCIRTES GUTTATUS.

Macleay, Aust. Cat. ii, p. 9.

*Hab.*—Port Jackson. Length, 3 inches.

## PETROSCIRTES ROTUNDICEPS.

Macleay, Aust. Cat. ii, p. 9.

*Hab.*—Port Jackson. Length, 3 inches.

## PETROSCIRTES CRISTICEPS.

Macleay, Aust. Cat. ii, p. 9.

*Hab.*—Port Jackson (Macleay); Clarence River (Ogilby). A single specimen brought down by Mr. T. Temperley. Length, 3 inches.

## PETROSCIRTES WILSONI.

Macleay, Proc. Linn. Soc. N. S. Wales ix, p. 171.

*Hab.*—Port Jackson. Length, 2½ inches.

280 *LEPIDOBLENNIUS GEMINATUS.*

Macleay, Aust. Cat. ii, p. 13.

*Hab.*—Port Jackson, common in rock-pools; Port Hacking; Jervis Bay. Length, 5 inches.

## PETRAITES HEPTAEOLUS.

Ogilby, Proc. Linn. Soc. N. S. Wales x, p. 225.

*Hab.*—Port Jackson. Length,  $3\frac{1}{2}$  inches.

## CRISTICEPS NASUTUS.

Günth., Cat. iii, p. 273; Macleay, Aust. Cat. ii, p. 18.

*Hab.*—New South Wales (Günther.) Length, nearly 2 inches.

## CRISTICEPS FASCIATUS.

Macleay, Aust. Cat. ii, p. 19.

*Hab.*—Port Jackson.

## CRISTICEPS MACLEAYI.

Casteln., Proc. Linn. Soc. N. S. Wales iii, p. 385.

*Hab.*—Port Jackson, common. Length, 7 inches.

## CRISTICEPS AURANTIACUS.

Casteln., Proc. Linn. Soc. N. S. Wales iii, p. 386.

*Hab.*—Port Jackson; Kiama. Length, 9 inches.

## CRISTICEPS PICTUS.

Macleay, Aust. Cat. ii, p. 25.

*Hab.*—Port Jackson. Length, 3 inches.

## CRISTICEPS ARGYROPLEURA.

Kner, Voy. Novara Fische, p. 199, t. 7. f. 4; Macleay, Aust. Cat. ii, p. 25.

*Hab.*—Port Jackson, common. Length, 4 inches.

TRIPTYGYIUM *sp.*

Günth., Voy. Challenger Shore Fishes, p. 28.

*Hab.*—Port Jackson.

## STICHARIUM DORSALE.

Günth., Ann. Nat. Hist. 1867, (3) xx, p. 63; Macleay, Aust. Cat. ii, p. 29.

*Hab.*—? Port Jackson (Günther.) Length,  $2\frac{1}{2}$  inches.

## PATICUS FRONTO.

Rich., Ann. Nat. Hist. 1844, xiv, p. 280, and Voy. Erebus and Terror Fishes, p. 20, pl. 13; Günth., Cat. iii, p. 292, and Study of Fishes, f. 227; Macleay, Aust. Cat. ii, p. 30.

*Hab.*—Australian seas; Port Jackson; Richmond River. Length, 9 inches.

## PATICUS MACULATUS.

Günth., Cat. ii, p. 292; Casteln., Proc. Linn. Soc. N. S. Wales ii, p. 231; Macleay, Aust. Cat. ii, p. 31.

*Hab.*—West Australia; Port Jackson (Krefft.)

## MUGILIFORMES.

## SPHYRÆNIDÆ.

## SPHYRENA NOVÆ-HOLLANDIE.

Günth., Cat. ii, p. 335; Macleay, Aust. Cat. ii, p. 32.

*Hab.*—Coasts of Victoria and New South Wales. Attains to 25 inches in length. *Pike* of Port Jackson.

## SPHYRENA OBTUSATA.

Cuv. & Val. iii, p. 350; Schleg., Faun. Japon. Poiss, p. 33, pl. 13, f. 2; Günth., Cat. ii, p. 339, and Fischo d. Sudsee, p. 211, pl. 119, f. B.; Kner, Voy. Novara Fische, p. 140; Klunz., Verh. z. b. Ges. Wien 1870, p. 820; Day, Fishes of India, p. 343, pl. 71, f. 5; Macleay, Aust. Cat. ii, p. 34.

*Sphyraena flavicauda*, Rüpp., N. W. Fische, p. 100, t. 25, f. 3.

*Hab.*—From the Red Sea through those of India and the Malay Archipelago to Japan and Australia; Port Jackson, common. *Pike* of the fishermen. Grows to 20 inches long.

## ATHERINIDÆ.

## ATHERINA LACUNOSA.

Forst., Deser. Anim. p. 298; Bl. Schn., p. 112; Günth., Fische d. Sudsee, p. 213, pl. 118, f. E (*not Bleek*).

*Atherina pinguis*, Lacép. v., p. 372, pl. 11, f. 1; Günth., Cat. iii, p. 399; Klunz., Fische d. Roth. Meer., p. 833; Day, Fishes of India, p. 344; All. & MacL., Proc. Linn. Soc. N. S. Wales i, p. 340; Macleay, Aust. Cat. ii, p. 38.

— *affinis*, Benn., Proc. Zool. Soc. 1831, i, p. 166.

— *pectoralis*, Cuv. & Val. x, p. 447.

— *forskali*, Rüpp., N. W. Fische, p. 132, t. 33, f. 1; Günth., Cat. iii, p. 397; Day, Fishes of India, p. 345, pl. 71, f. 4; Macleay, Proc. Linn. Soc. N. S. Wales vii, p. 362.

*Hab.*—East African, Indian, Malayan, Australian, and South Seas; New South Wales coast, abundant. *Hardihead* of Sydney. Grows to a length of 6 inches; an excellent breakfast fish.

## ATHERINA SIGNIFER.

*Pseudomugil signifer*, Kner, Voy. Novara Fische, p. 275, pl. 13, f. 5, a and b.

*Atherina signata*, Günth., Ann. Nat. Hist. 1867, (3) xx, p. 64; Macleay, Aust. Cat. ii, p. 40

*Hab.*—Cape York (Günther); Sydney (Kner). Length, 1½ in.

## ATHERINICHTHYS JACKSONIANA.

*Atherina jacksoniana*, Quoy & Gaim., Voy. Uranie Zool., p. 333; Cuv. & Val. x, p. 461.

*Atherinichthys jacksoniana*, Günth., Cat. iii, p. 402; Macleay, Aust. Cat. ii, p. 41.

*Hab.*—Tasmania; Port Jackson. Length, 4½ inches.

## ATHERINICHTHYS DUBOULAYI.

Casteln., Proc. Linn. Soc. N. S. Wales iii, p. 143.

*Hab.*—Richmond River. Length rather over 3 inches.

## NEMATOCENTRIS NIGRANS.

*Atherina nigrans*, Rich., Ann. Nat. Hist. 1843, xi, p. 180.

*Atherinichthys nigrans*, Günth., Cat. iii, p. 406.

*Nematocentris splendida*, Peters, Monatsber. Ak. Wiss. Berl. 1866 (July), p. 516.

*Strabo nigrofasciatus*, Kner & Steind., Sitzsber. Ak. Wiss. Wien 1866 (Oct.), p. 372, f. 10 (*immature*).

*Nematozentris nigrans*, Günth., Ann. Nat. Hist. 1867, (3) xx, p. 65.

*Hab.*—Fresh waters of North Australia; Clarence and Severn Rivers, N. S. Wales. Length, 5 inches.

#### MUGILIDÆ.

##### 299 MUGIL GRANDIS.

Casteln., Proc. Linn. Soc. N. S. Wales iii, p. 386; Macleay, op. cit. iv, p. 412; Tenison-Woods, Fisheries of N. S. Wales, p. 71, pl. 30.

*Hab.*—From Brisbane to the Gippsland Lakes, common. *Sea Mullet* of the Sydney market. Length up to 2 feet. An excellent food fish.

#### MUGIL DOBULA.

Günth., Cat. iii, p. 420, and Fische d. Sudsee p. 214, pl. 120, f. 1; Casteln., Proc. Linn. Soc. N. S. Wales iii, p. 387; Macleay, op. cit. iv, p. 415, and viii, p. 208.

*Hab.*—Coasts of New South Wales and Queensland, entering fresh waters, common; Aneiteum; Sandwich Islands. *Hard-gut Mullet* of Sydney. Length up to 15 inches. An excellent food fish.

#### MUGIL OEUR.

*Mugil öur*, Forsk., p. 74; Rüpp., N. W. Fische, p. 131.

— *cephalotus*, Cuv. & Val. xi, p. 110; Cant., Ann. Nat. Hist. 1842, ix, p. 284; Eyd. & Soul., Voy. Bonite Zool. i, p. 175, pl. 4, f. 4; Günth., Cat. iii, p. 419; Kner, Voy. Novara Fische, p. 224; Macleay, Proc. Linn. Soc. N. S. Wales iv, p. 416.

— *japonicus*, Schleg., Faun. Japon. Poiss., p. 134, pl. 72, f. 1; Rich., Ichthyol. China, p. 247.

— *oeur*, Klunz., Fische d. Roth. Meer., p. 829; Day, Fishes of India, p. 353, pl. 75, f. 3; Steind., Denk. Ak. Wien xli, p. 40.

*Hab.*—From the Red Sea through those of India to China, Japan, and Australia; Sydney (Kner). Length up to 3 feet.

#### MUGIL ARGENTEUS.

Quoy. & Gaim., Voy. Uranie Poiss., p. 338, pl. 59, f. 3; Günth., Cat. iii, p. 424, and Fische d. Sudsee, p. 214; Macleay, Proc. Linn. Soc. N. S. Wales iv, p. 417.

*Mugil ferrandi*, Cuv. & Val. xi, p. 142.

*Hab.*—S. Australia; Fitzroy River; Port Jackson (Günther); Richmond River (Aust. Mus.). Length up to 12 inches.

#### MUGIL LONGIMANUS.

Günth., Cat. iii, p. 428; Steind., Denk. Ak. Wien xli, p. 5.

*Hab.*—East Indian Archipelago; Port Jackson (Steindachner).

#### MUGIL BREVICEPS.

Steind., Sitzgsber. Ak. Wiss. Wien 1866, liii, p. 459, t. 1, f. 1.

*Hab.*—Port Jackson.

#### MUGIL AUSTRALIS.

Steind., Denk. Ak. Wien xli, p. 5.

*Hab.*—Port Jackson.

#### MUGIL PERONII.

Cuv. & Val. xi, p. 138; Günth., Cat. iii, p. 452; Casteln., Proc. Zool. Soc. Vict. ii, p. 151, and Proc. Linn. Soc. N. S. Wales iii, p. 387; Macleay, op. cit. iv, p. 421.

*Hab.*—Coasts of Victoria, New South Wales, and Queensland, common. *Flat-tail Mullet* of Sydney market. Length up to 12 inches. An excellent fish for the table.

## 307 MUGIL COMPRESSUS.

Günth., Cat. iii, p. 451, and Fische d. Sudsee, pl. 123, f. A; Macleay, Proc. Linn. Soc. N. S. Wales iv, p. 421, and viii, p. 269.

*Hab.*—New South Wales (Günther); Port Darwin (Macleay); Richmond River (Ogilby). Length up to 1 foot.

## MUGIL PETTARDI.

Casteln., Res. on the Fishes of Aust., p. 32; Macleay, Proc. Linn. Soc. N. S. Wales iv., p. 422.

*Hab.*—Richmond River, common. *Richmond Mullet*. Length up to 15 inches. Of excellent quality for the table.

I have omitted *Mugil crenidens*, Kner (Voy. Novara Fische, p. 229), because he gives the locality merely as New Holland (not Sydney, as stated by the Hon. Wm. Macleay, Proc. Linn. Soc. N. S. Wales iv, p. 421), which is much too vague.

## MYXUS ELONGATUS.

Günth., Cat. iii, p. 466; Kner, Voy. Novara Fische, p. 230; Macleay, Proc. Linn. Soc. N. S. Wales iv, p. 426.

*Hab.*—Coasts of Victoria and New South Wales. *Sand Mullet* and *Tallegallan* of the fishermen. Length up to 12 inches. Little esteemed as an article of food.

## GASTROSTEIIFORMES.

## FISTULARIIDÆ.

## FISTULARIA SERRATA.

*Fistularia tabaccaria*, White, Voy. N. S. Wales, p. 296, f. 2; Bl., t. 387, ff. 2, 3.

— *serrata*, Cuv. Règne Anim.; Günth., Cat. iii, p. 533, and Voy. Challenger Shore Fishes, p. 63, pl. 32, f. C; Kner, Voy. Novara Fische, p. 238; Day, Fishes of India, p. 360, pl. 76, f. 3; Casteln., Proc. Linn. Soc. N. S. Wales iii, p. 388; Macleay, op. cit. viii, p. 270, and Aust. Cat. ii, p. 49.

— *immaculata*, Cuv., Règne Anim.; Rich., Ichthyol. China, p. 247; Schleg., Faun. Japon. Poiss., p. 320.

— *commersonii*, Rupp., N. W. Fische, p. 142.

*Hab.*—From the east coast of Africa through the Indian seas to China and Australia; Bermudas; Port Jackson, common. *Pipe-fish* of the Sydney fishermen. Grows to 5 feet in length.

## FISTULARIA DEPRESSA.

Günth., Voy. Challenger Shore Fishes, p. 69, pl. 32, f. D.

*Hab.*—From the east coast of Africa through all the Indian seas to China and Australia; Fiji Islands; Coast of California; New South Wales (Günther). Grows to 5 feet in length.

## CENTRISCIFORMES.

## CENTRISCIDÆ.

## CENTRISCUS GRACILIS.

Lowe, Proc. Zool. Soc. 1839, p. 86, and Trans. Zool. Soc. iii, p. 12; Günth., Cat. iii, p. 521; Macleay, Aust. Cat. App., p. 42.

*Hab.*—Madeira; West coast of Africa; Chinese and Japanese seas; Port Jackson. Length of specimen rather over 4 inches. Our example belongs to the short-spined form, var. *japonicus*, Günth.

## GOBIESOCIFORMES.

## GOBIESOCIDÆ.

## DIPLOCREPIS COSTATUS.

Ogilby, Proc. Linn. Soc. N. S. Wales x, p. 270.

*Hab.*—Port Jackson. Length up to 2½ inches.

## 34 CREPIDOGASTER TASMANIENSIS.

Günth., Cat. iii, p. 507; Kner, Voy. Novara Fische, p. 277; Macleay, Aust. Cat. ii, p. 53.

*Hab.*—Tasmania; Sydney (Kner). Length 2·15 inches.

## CHANNIFORMES.

## OPHIOCEPHALIDÆ.

## OPHIOCEPHALUS STRIATUS.

Bloch, t. 359; Cuv. & Val. vii, p. 417, pls. 202 and 206; Günth., Cat. iii, p. 474, and Study of Fishes, f. 234; Kner, Voy. Novara Fische, p. 234; Day, Fishes of India, p. 366 (*stom. & cæc. pyl. fgd.*); Bleek., Atl. Ichthiol. Oph., t. 3, f. 1; Macleay, Aust. Cat. ii, p. 54.

*Hab.*—Fresh waters of India, Burmah, China and the Philippines; Sydney (Kner). Attains to the length of 3 feet.

## LABYRINTHIBRANCHII.

## LABYRINTHICI.

## POLYACANTHUS CUPANUS.

Cuv. & Val. vii, p. 357; Günth., Cat. iii, p. 381; Kner, Voy. Novara Fische, p. 218; Day, Fishes of India, p. 371, pl. 78, f. 4.

*Hab.*—Coasts of India; Sydney (Kner). Length up to 3 inches.

## TÆNIIFORMES.

## TRACHYPTERUS JACKSONENSIS.

*Regalecus jacksonensis*, Ramsay, Proc. Linn. Soc. N. S. Wales v, p. 631, pl. 20.

*Hab.*—Coast of New South Wales; Port Jackson. *Southern Ribbon-fish*. Largest specimen 7 feet. Closely allied to *Trachypterus arcticus*.

## ACANTHOPTERYGII PHARYNGOGNATHI.

## POMACENTRIDÆ.

## POMACENTRUS UNIFASCIATUS.

Steind., Sitzgsber. Ak. Wiss. Wien lvi, p. 326; Kner, op. cit. lviii, pp. 31 & 348, t. 8, f. 24.

*Hab.*—Fiji, (Kner); Port Jackson (Steindachner).

## POMACENTRUS DOLII.

Macleay, Aust. Cat. ii, p. 65, pl. 1, f. 1.

*Hab.*—Port Jackson. Length up to 4 inches. Lives in large shells, such as those of *Dolium variegatum*.

## PARMA MICROLEPIS.

Günth., Cat. iv, p. 57; Macleay, Aust. Cat. ii, p. 69.

*Hab.*—Port Jackson; Botany Bay. Length up to 6 inches.

## PARMA SQUAMIPINNIS.

Günth., Cat. iv, p. 58; Macleay, Aust. Cat. ii, p. 69.

*Glypheidodon australis*, Steind., Sitzgsber. Ak. Wiss. Wien lvi, p. 328.

*Hab.*—Port Jackson. Length 8 inches.

222 *HELIASTES HYPSILEPIS.*

Günth., Ann. Nat. Hist. 1867, (3) xx, p. 66; Casteln., Proc. Linn. Soc. N. S. Wales iii, p. 388; Macleay, Aust. Cat. ii, p. 71.

*Hab.*—Port Jackson. Length 6·50 inches.

## HELIASTES IMMACULATUS.

Ogilby, Proc. Linn. Soc. N. S. Wales x, p. 446.

*Hab.*—Port Jackson. Length up to 6 inches.

## LABRID.E.

## HETEROCHÆROPS VIRIDIS.

Steind., Sitzgsber. Ak. Wiss. Wien 1866, liii, p. 461, pl. 5, f. 3.

*Hab.*—Port Jackson.

## TROCHOCOPUS UNICOLOR.

Günth., Ann. Nat. Hist. 1876, (4) xvii, p. 398; Macleay, Aust. Cat. ii, p. 76.

*Hab.*—Port Jackson (Günther). Length of specimen 14·50 inches.

## COSSYPHUS UNIMACULATUS.

Günth., Cat. iv, p. 109; Casteln., Proc. Linn. Soc. N. S. Wales iii, p. 389; Macleay, Aust. Cat. ii, p. 77; Tenison-Woods, Fisheries of New South Wales, p. 75, pl. 32.

*Hab.*—New South Wales coast; Port Jackson, common. *Pigfish* of the Sydney market. Attains a length of 18 inches. An excellent table-fish.

## COSSYPHUS GOULDII.

*Labrus gouldii*, Rich., Ann. Nat. Hist. 1843, xi, p. 353.

*Cossyphus vel Lachnolaimus gouldii*, Rich., Voy. Erebus & Terror Fishes, p. 132.

*Cossyphus gouldii*, Rich., Ann. Nat. Hist. 1851, (2) vii, p. 288, and Proc. Zool. Soc. 1850, p. 72, pl. 3, f. 3; Macleay, Aust. Cat. ii, p. 78; Tenison-Woods, Fisheries of N. S. Wales, p. 74, pl. 31.

*Hab.*—Western Australia; Port Jackson, common. *Blue Groper* of the fishermen. Attains a length of 40 inches. A good table fish. Though it seems impossible to specifically separate our common Blue Groper from the fish described by Sir John Richardson as *Cossyphus gouldii*, it should nevertheless be borne in mind that our fish invariably has a strong posterior canine tooth at each angle of the mouth, and that the fishes, though common at each of the localities mentioned, have not hitherto been recorded from intermediate localities.

*Cossyphus vulpinus*, Rich., has been included in Castelnau's list (Proc. Linn. Soc. N. S. Wales iii, p. 354), and again in the Report on the Fisheries of New South Wales, App. E, p. 54, but no proof of its occurrence is adduced.

## LABRICHTHYS CELIDOTUS.

*Labrus celidotus*, Forst., Descr. Anim. ed. Licht, p. 133; Bl. Schn., p. 265; Rich., Voy. Erebus and Terror Fishes, p. 53, pl. 31, ff. 1—5.

— *pæcilioleura*, Cuv. & Val. xiii, p. 95.

*Sparus notatus*, Solander, MS.

*Julis* (?) *notatus*, Rich., Ann. Nat. Hist. 1843, xi, p. 425.

*Labrichthys celidota*, Günth., Cat. iv, p. 113, & Ann. Nat. Hist. 1876, (4) xvii, p. 398; Macleay, Aust. Cat. ii, p. 78.

*Hab.*—Coasts of Australia and New Zealand; Botany Bay.

## LABRICHTHYS LATICLAVIUS.

*Labrus laticlavius*, Rich., Proc. Zool. Soc. 1839, p. 99, & Trans. Zool. Soc. iii, p. 139, & Voy. Erebus & Terror Fishes, p. 128, pl. 56, ff. 3—6.

*Labrichthys latiocularis*, Günth., Cat. iv, p. 115, and Ann. Nat. Hist. 1867, (3) xx, p. 66; Macleay, Aust. Cat. ii, p. 80.

*Hab.*—Coasts of Tasmania; King George's Sound; Port Jackson, common. Length up to a foot.

LABRICHTHYS LUCULENTUS.

*Labrus luculentus*, Rich., Voy. Erebus & Terror Fishes, p. 130.

*Labrichthys luculenta*, Günth., Cat. iv, p. 116; Macleay, Aust. Cat. ii, p. 80.

*Hab.*—East and west coasts of Australia; Norfolk Island; Port Jackson. Length 6 inches.

LABRICHTHYS PARILUS.

*Tautoga parila*, Rich., Proc. Zool. Soc. 1850, p. 70, & Ann. Nat. Hist. 1851, (2) vii, p. 286.

*Labrichthys parila*, Günth., Cat. iv, p. 117; Casteln., Proc. Linn. Soc. N. S. Wales iii, p. 389; Macleay, Aust. Cat. ii, p. 81.

*Hab.*—West Australia; Port Jackson (Castelnau). Length up to 8 inches.

LABRICHTHYS GYMNOGENIS.

Günth., Cat. iv, p. 117, and Ann. Nat. Hist. 1867, (3) xx, p. 66; Steind., Sitzgsber. Ak. Wiss. Wien lvi, p. 342; Casteln., Proc. Linn. Soc. N. S. Wales iii, p. 389; Macleay, Aust. Cat. ii, p. 82.

*Hab.*—Port Jackson, common. Length up to a foot.

LABRICHTHYS NIGROMARGINATUS.

Macleay, Proc. Linn. Soc. N. S. Wales iii, p. 35, pl. 3, f. 3.

*Hab.*—Port Jackson. Length up to a foot.

LABRICHTHYS DORSALIS.

Macleay, Aust. Cat. ii, p. 87.

*Hab.*—Port Jackson. Length 7 inches.

LABRICHTHYS LABIOSUS.

Macleay, Aust. Cat. ii, p. 88.

*Hab.*—Port Jackson.

LABRICHTHYS MELANURUS.

Macleay, Aust. Cat. ii, p. 88, pl. 1, f. 2.

*Hab.*—Port Jackson. Length 6 inches.

PLATYGLOSSUS TRIMACULATUS.

*Julis trimaculata*, Quoy & Gaim., Voy. Astrolabe Zool. ii, p. 705, pl. 20, f. 2; Cuv. & Val. xiii, p. 452.

*Julis spilurus*, Bleek., Banda i, p. 252.

*Güntheria trimaculata*, Bleek., Atl. Ichthyol. Labr., p. 138, t. 32, f. 1.

*Platyglossus trimaculatus*, Günth., Cat. iv, p. 153; Kner, Voy. Novara Fische, p. 255; Macleay, Proc. Linn. Soc. N. S. Wales viii, p. 273.

*Hab.*—Sea of Vanicolo; East Indian Archipelago; South-east New Guinea (Macleay); Sydney (Kner). Length up to 5 inches.

NOVACULA JACKSONIENSIS.

Ramsay, Proc. Linn. Soc. N. S. Wales vi, p. 198.

*Hab.*—Port Jackson. Example immature.

CORIS LINEOLATA.

*Julis lineolata*, Cuv. & Val. xiii, p. 436.

— *cyanogramma*, Rich., Ann. Nat. Hist. 1851, (2) vii, p. 289, and Proc. Zool. Soc. 1850, p. 73.

*Ophthalmolepis lineolata*, Bleek., Proc. Zool. Soc. 1861, p. 413; Kner, Voy. Novara Fische, p. 253, pl. 11, f. 1.

*Coris lineolata*, Günth., Cat. iv, p. 206; Casteln., Proc. Linn. Soc. N. S. Wales iii, p. 390.

*Hab.*—Australian coasts; Port Jackson, common. *Maori* of the New South Wales coast. Grows to 15 inches in length. Said to be fair eating.

349 CORIS SEMICINCTA.

Ramsay, Proc. Linn. Soc. N. S. Wales vii, p. 301.

*Hab.*—Lord Howe's Island; Broken Bay.

CORIS REX.

Ramsay and Ogilby, Proc. Linn. Soc. N. S. Wales x, (*in press*).

*Hab.*—Bondi, N. S. Wales. Length 16·50 inches.

PSEUDOSCARUS OCTODON.

Bleek., Atl. Ichthiol. Scar., p. 33, t. 13, f. 2; Günth., Cat. iv, p. 234; Kner, Voy. Novara Fische, p. 262.

*Hab.*—Buton (Bleeker); Sydney (Kner). Length up to 9·50 inches.

HETEROSCARUS FILAMENTOSUS.

Casteln., Proc. Zool. Soc. Vict. i, p. 245, & ii, p. 74; Macleay, Aust. Cat. ii, p. 104.

*Hab.*—South Australia; Port Jackson. Length up to 7 inches.

HETEROSCARUS CASTELNAUI.

Macleay, Proc. Linn. Soc. N. S. Wales iii, p. 36, pl. 5, f. 2.

*Hab.*—Port Jackson. *Rainbow-fish* at Sydney. Length up to 9 inches. Very closely allied to the preceding species; perhaps the female of it.

ODAX BALTEATUS.

Cuv. & Val. xiv, p. 303; Günth., Cat. iv, p. 240; Macleay, Aust. Cat. ii, p. 106.

*Odax algensis*, Rich., Proc. Zool. Soc. 1840, p. 26, and Trans. Zool. Soc. iii, p. 148.

*Hab.*—Tasmania; Port Jackson. *Kelp-fish* of Tasmania.

ODAX SEMIFASCIATUS.

Cuv. & Val. xiv, p. 299, pl. 407; Günth., Cat. iv, p. 241; Casteln., Proc. Linn. Soc. N. S. Wales iii, p. 390; Macleay, Aust. Cat. ii, p. 107.

*Hab.*—Port Jackson, common. *Rock Whiting* of the Sydney market. Grows to the length of 15 inches. A poor food-fish.

ODAX <sup>✓</sup>RICHARDSONII.

*Odax pusillus*, Cuv. & Val. xiv, pl. 408 (*not Forst.*).

— *richardsonii*, Günth., Cat. iv, p. 241, and Ann. Nat. Hist. 1867, (3) xx, p. 66; Casteln., Proc. Zool. Soc. Vict. i, p. 152; Macleay, Aust. Cat. ii, p. 107.

— *hyrtlii*, Steind., Sitzgsber. Ak. Wiss. Wien 1866, liii, p. 461.

*Hab.*—Port Phillip; Tasmania (Aust. Mus.); New South Wales (Günther). The *Stranger* at Melbourne. Attains a length of 15 inches.

ODAX BRUNNEUS.

Macleay, Aust. Cat. ii, p. 109.

*Hab.*—Port Jackson. Length 3·50 inches.

ODAX OBSCURUS.

Casteln., Proc. Zool. Soc. Vict. i, p. 154, and Proc. Linn. Soc. N. S. Wales iii, p. 391; Macleay, Aust. Cat. ii, p. 108.

*Hab.*—Port Phillip & Port Jackson (Castelnau).

## 350 OLISTEROPS BRUNNEUS.

Macleay, Proc. Linn. Soc. N. S. Wales iii, p. 36, pl. 5, f. 1.

*Hab.*—Port Jackson. *Herring-cake* at Sydney. Length up to 18 inches. In a fresh state the males of this species correspond exactly with Sir John Richardson's description of *O. cyanomelas*, except that I have never seen the blue pectoral streak which he describes, and more especially all our examples have from 56 to 59 scales in the lateral line; in fact if fifty-eight were read instead of forty-eight in Richardson's description it would be impossible to separate the two forms.

## ANACANTHINI.

## GADOPSIDÆ.

## GADOPSIS MARMORATUS.

Rich., Voy. Erebus & Terror Fishes, p. 122, pl. 59, ff. 6-11; Günth., Cat. iv, p. 318; Macleay, Aust. Cat. ii, p. 112.

*Hab.*—Fresh waters of Tasmania, South Australia, Victoria, and New South Wales. Prof. McCoy. (Prod. Zool. Vict. dec. iii, pl. 27, f. 2) has described a *Gadopsis* from the Yarra, which he names *G. gracilis*, and a second from the Bunyip River, Gippsland, under the name of *G. gibbosus*. The differences between these and the typical form appear to be slight, and only such as might be expected in a species of such wide range, and which exists under such different conditions of life and diversities of climate. The Hon. Wm. Macleay also mentions a *Gadopsis* (Proc. Linn. Soc. N. S. Wales x, p. 267) which is more elongate than *G. marmoratus*, and which is probably the same form which Prof. McCoy describes as *G. gracilis*; it came from the Little River, near Yass, New South Wales.

## Gadoidei.

## GADIDÆ.

## LOTELLA FULIGINOSA.

Günth., Cat. iv, p. 347; Macleay, Aust. Cat. ii, p. 114.

*Hab.*—Port Jackson, (Castelnau) *fide* Macleay. Count Castelnau gives no description of the fish which he includes in his list as *L. rubiginosa*, Günth., and I doubt the propriety of continuing to keep it in the New South Wales catalogue, the more so since Castelnau may have had in his mind the *Gadus rubiginosus* of Solaander's MS., which is probably our *Pseudophycis bachus*.

## LOTELLA CALLARIAS.

Günth., Ann. Nat. Hist. 1863, (3) xi, p. 116; Casteln., Proc. Linn. Soc. N. S. Wales iii, p. 391; McCoy, Prod. Zool. Vict. dec. ii, pl. 19; Macleay, Aust. Cat. ii, p. 114.

*Lotella schuetzii*, Steind., Sitzsber. Ak. Wiss. Wien 1866, liii, p. 456.

*Hab.*—Port Phillip; Port Jackson (Castelnau). *Small-scaled Rock-cod*. Attains to the length of 24 inches. Not much esteemed for the table.

## LOTELLA LIMBATA.

*Lotella marginata*, Macleay, Aust. Cat. ii, p. 114; Tenison-Woods, Fisheries of N. S. Wales, p. 76, pl. 23 (low. fig.)

*Hab.*—Port Jackson. *Beardy* of the Sydney Market. Length up to 20 inches. Dr. Günther (Ann. Nat. Hist. 1878, (5) ii, p. 19) having given the specific name of *marginata* to a *Lotella* obtained by the Challenger Expedition, off the south-western coast of South America, I am obliged to change the name of our species, and I have selected in its place a name which conveys the same meaning as that under which the species was originally described by the Hon. Wm. Macleay.

## LOTELLA GRANDIS.

Ramsay, Proc. Linn. Soc. N. S. Wales v, p. 462.

*Hab.*—Wollongong.

## 356 PSEUDOPHYCIS BACHUS.

*Gadus bacchus*, Forst., Descr. Anim. ed. Licht., p. 120.

*Enchelyopus bacchus*, Bl. Schn., p. 53.

*Lota breviuscula*, Rich., Voy. Erebus & Terror Fishes, p. 61, pl. 38, f. 1.

*Lotella bacchus*, Günth., Cat. iv, p. 317; Parker, Trans. N. Zeal. Inst. xv, p. 234, pl. 33.

*Pseudophycis breviusculus*, Günth., Cat. iv, p. 350; Ramsay, Proc. Linn. Soc. N. S. Wales vi, p. 717.

— *bacchus*, Günth., Voy. Challenger Shore Fishes, p. 28, and Study of Fishes, p. 542, f. 248.

*Hab.*—New Zealand; coast of New South Wales; Twofold Bay (Günther); Port Jackson, Ramsay. *Red cod* of New Zealand.

## Pleuronectoidei.

## PLEURONECTIDÆ.

PSEUDORHOMBUS RUSSELLII. = *arcturus*

*Platessa russelli*, Gray & Hardw., Ill. Ind. Zool., t. 94, f. 2; Cant., Cat. Mal. Fishes, p. 214.

*Rhombus lentiginosus*, Rich., Ann. Nat. Hist. 1843, xi, p. 495.

*Platessa chrysopтера*, Rich., Ichthyol. China, p. 278.

*Rhombus arsius*, Bleek., Beng. en Hind., p. 76.

*Pseudorhombus russelli*, Günth., Cat. iv, p. 424; Kner, Voy. Novara Fische, p. 283; Bleek., Atl. Ichthyol. Pleuronect., p. 6, t. 233, f. 2; Casteln., Proc. Linn. Soc. N. S. Wales iii, p. 391; Macleay, op. cit. ii, p. 362, and Aust. Cat. ii, p. 124; Tenison-Woods, Fisheries of N. S. Wales, p. 76, pl. 33.

— *arsi*, Günth., Cat. iv, p. 426; Day, Fishes of India, p. 423, pl. 91, f. 5.

*Teratorhombus excisiceps*, Macleay, Aust. Cat. ii, p. 126 (*malformation*).

*Hab.*—From the east coast of Africa through the Indian seas to Australia; Port Jackson, common in summer. *Flounder* of Port Jackson. Attains to the length of 15 inches. A moderate fish for the table.

## PSEUDORHOMBUS MULTIMACULATUS.

Günth., Cat. iv, p. 427; Macleay, Aust. Cat. ii, p. 125.

*Hab.*—Coast of New South Wales, common. *Flounder* of Port Jackson; not distinguished from the preceding. Grows to 12 inches in length. A moderate table fish.

## RHOMBOIDICHTHYS SPINICEPS.

Macleay, Aust. Cat. ii, p. 127.

*Hab.*—Port Jackson. Length 4·50 inches.

## LOPHONECTES GALLUS.

Günth., Voy. Challenger Shore Fishes, p. 29, pl. 15, f. B. (*very bad*).

*Lophorhombus cristatus*, Macleay, Proc. Linn. Soc. N. S. Wales vii, p. 14.

*Hab.*—Port Jackson. Length up to 7 inches. In Dr. Günther's figure the fish is colored on the wrong side, the short first dorsal ray is omitted, and there is a separation between the elongate and short rays of that fin, which is purely imaginary.

## AMMOTRETIS ADSPERSUS.

*Ammotretis rostratus*, var. *adspersus*, Kner, Voy. Novara Fische, p. 286, t. 13, f. 4.

— *zonatus*, Macleay, Proc. Linn. Soc. N. S. Wales vii, p. 367.

— *macleayi*, Ogilby, Proc. Linn. Soc. N. S. Wales x, p. 121.

*Rhombosolea bassensis*, Casteln., Proc. Zool. Soc. Vict. i, p. 167.

*Hab.*—Coasts of New South Wales and Victoria. Attains to the length of 10 inches.

It is probable that this species will prove to be identical with the *Ammotretis rostratus* of Dr. Günther, but his specimen must have been abnormally elongate, if the comparative measurement of height given in the Catalogue of Fishes, vol. iv, p. 458, is correct. Should further examination prove their identity, the range of the fish would be increased by Tasmania, whence it was originally described, and New Zealand, from which it has been recorded by Hutton, (Trans. N. Zeal. Inst. viii, p. 215), who had previously (op. cit. v, p. 267, pl. 11) described an *A. guentheri* from the same place. The Australian Museum is fortunate in possessing the type specimen of Count Castelnau's *Rhombosolca bassensis*, labelled in his own handwriting, and it is undoubtedly this species.

### 362 LEOPS PARVICEPS.

Günth., Voy. Challenger Shore Fishes, p. 29, pl. 15, f. A.

*Hab.*—Twofold Bay, 120 fathoms (?) Length, to 5·50 inches.

### RHOMBOSOLEA LEPORINA.

Günth., Cat. iv, p. 460; Kner, Voy. Novara Fische, p. 287; Hutton, Trans. N. Zeal. Inst. v, p. 268, pls. 11, 12; Macleay, Aust. Cat. ii, p. 130.

*Hab.*—Sydney (Kner). Length, up to 8 inches.

*Rhombosolea flesoides*, Günth., is included in Castelnau's list (Proc. Linn. Soc. N. S. Wales iii, p. 354), but no authority is given.

### SOLEA MICROCEPHALA.

Günth., Cat. iv, p. 466; Kner, Voy. Novara Fische, p. 288; Macleay, Aust. Cat. ii, p. 135.

*Hab.*—New South Wales coast; Port Jackson, common. Length, up to 8 inches.

### SOLEA MACLEAYANA.

Ramsay, Proc. Linn. Soc. N. S. Wales v, p. 462.

*Hab.*—Port Jackson. Length, up to 7 inches.

### SOLEA FLUVIATILIS.

Ramsay, Proc. Linn. Soc. N. S. Wales vii, p. 111.

*Hab.*—Hunter River, fresh water. Length, 3·60 inches.

### SOLEA LINEATA.

Ramsay, Proc. Linn. Soc. N. S. Wales vii, p. 406.

*Hab.*—Port Stephens. Length, 2·75 inches.

### SOLEA HUMILIS.

Cant., Cat. Mal. Fishes, p. 219; Günth., Cat. iv, p. 471; Kner, Voy. Novara Fische, p. 288.

*Solea maculata*, Bleek., Verhand. Bat. Genootsch. xxiv, Pleuronect., p. 17.

*Hab.*—Seas of Java and Penang; Sydney (Kner). Length, up to 4 inches.

### ACHIRUS PAVONINUS.

Lacép. iv, pp. 658, 661; Bleek., Atl. Ichthyol. Pleuronect., p. 24, pl. 241, f. 1; Day, Fishes of India, p. 427, pl. 93, f. 2.

*Pleuronectes pavoninus*, Shaw, Zool. iv, p. 310.

*Pardachirus pavoninus*, Günth., Cat. iv, p. 479; Macleay, Proc. Linn. Soc. N. S. Wales i, p. 347, and Aust. Cat. ii, p. 136.

*Solea (Pardachirus) pavonina*, Steind., Fische Sing. 1870, p. 570.

*Hab.*—Malay Archipelago; Australian coasts; Port Jackson. Length, up to 6 inches.

## 370 SYNAPTURA QUAGGA.

*Aesopias quagga*, Kaup, Wieg. Arch. 1858, p. 98.

*Synaptura quagga*, Günth., Cat. iv, p. 485; Casteln., Proc. Linn. Soc. N. S. Wales iii, p. 392; Macleay, Aust. Cat. ii, p. 136.

*Hab.*—Chinese seas; Sydney, Brisbane, and Swan River (Castelnau). Length, up to 6 inches.

## SYNAPTURA NIGRA.

Macleay, Proc. Linn. Soc. N. S. Wales v, p. 49; Tenison-Woods, Fisheries of N. S. Wales, p. 77.

*Hab.*—Estuaries of the New South Wales coast. *Sole* of the Sydney market. Attains to the length of 10 inches. An excellent table-fish.

## SYNAPTURA FASCIATA.

Macleay, Proc. Linn. Soc. N. S. Wales vii, p. 14.

*Hab.*—Port Jackson. Length, up to 8 inches.

## PLAGUSIA UNICOLOR.

Macleay, Aust. Cat. ii, p. 138.

*Hab.*—Port Jackson. *Lemon Sole* of the fishermen. Length, up to 10 inches. /2

## PHYSOSTOMI.

## SILURIDÆ.

## HOMALOPTERÆ.

## PLOTOSINA.

## PLOTOSUS ARAB.

*Silurus arab*, Forsk., Descr. Anim. xvi, no. 36.

*Platystacus anguillaris*, Bl. viii, p. 61, t. 373, f. 1.

*Plotosus anguillaris*, Lacép. v, p. 130, pl. 3, f. 2; Rüpp., N. W. Fische, p. 76; Günth., Cat. v, p. 24; Macleay, Aust. Cat. ii, p. 139.

— *ikapor*, Less. & Garn., Voy. Coquille Zool. ii, p. 132, pl. 31, f. 3.

— *lineatus*, Cuv. & Val. xv, p. 412; Rich., Ichthyol. China, p. 286; Schleg., Faun. Japon. Poiss., p. 228, pl. 104, f. 3.

— *arab*, Bleek., Atl. Ichthyol. Silur., p. 98, t. 95, f. 2; Kner. Voy. Novara Fische, p. 300; Day, Fishes of India, p. 483, pl. 112, f. 4.

*Hab.*—From the east coast of Africa through the Indian Seas to Japan and Polynesia; coasts of North Australia and Queensland; Clarence River (Ogilby); a small specimen forwarded by Mr. T. Temperley.

## COPIDOGLANIS TANDANUS.

*Plotosus tandanus*, Mitch., Exp. into Int. of Australia, ed. 2, vol. i, p. 95, pl. 6, f. 2.

*Copidoglanis tandanus*, Günth., Cat. v, p. 26; Klunz., S.B. Ak. Wien lxxx, Abth. i, p. 410; Macleay, Aust. Cat. ii, p. 141, and Proc. Linn. Soc. N. S. Wales viii, p. 208; Tenison-Woods, Fisheries of N. S. Wales, p. 105.

*Hab.*—Rivers of New South Wales. *Fresh-water Cat-fish*. Length, up to 3 feet.

## COPIDOGLANIS OBSCURUS.

Günth., Cat. v, p. 26.

*Hab.*—Port Jackson (Krefft).

## 377 CNIDOGLANIS MEGASTOMA.

*Plotosus megastomus*, Rich., Voy. Erebus & Terror Fishes, p. 31, pl. 21, ff. 1-3.

*Cnidoglanis megastoma*, Günth., Cat. v, p. 27, and Study of Fishes, f. 258; Casteln., Proc. Linn. Soc. N. S. Wales iii, p. 392; Macleay, Aust. Cat. ii, p. 144; Tenison-Woods, Fisheries of N. S. Wales, p. 81.

*Chæroplotosus decemfilis*, Kner, Voy. Novara Fische, p. 300, pl. 13, f. 1 (an *Plotosus limbatus*, Cuv. & Val. xv, p. 422).

*Hab.*—Coast of New South Wales; Port Jackson, common. The *Cat-fish* of Sydney. Attains a length of 30 inches. Though the flesh of this fish is excellent, there is a prejudice against it, which makes it unsaleable, except at a nominal price to foreign sailors and Chinese.

## CNIDOGLANIS LEPTURUS.

Günth., Cat. v, p. 28; Casteln., Proc. Linn. Soc. N. S. Wales iii, p. 393; Macleay, Aust. Cat. ii, p. 145.

*Hab.*—Port Jackson. Length, up to 18 inches.

## PROTEROPTERÆ.

## ARIINA.

## ARIUS AUSTRALIS.

Günth., Proc. Zool. Soc. 1867, p. 103 (*fig. of head*), and Study of Fishes, f. 261; Casteln., Proc. Linn. Soc. N. S. Wales iii, p. 50; Macleay, Aust. Cat. ii, p. 149.

*Hab.*—Hunter and Richmond Rivers (Günther); Norman River (Castelnau). Length, up to 18 inches.

## ARIUS THALASSINUS.

*Bagrus thalassinus*, Rüpp., N. W. Fische, p. 75, pl. 20, f. 2.

*Arius nasutus*, Cuv. & Val. xv, p. 60.

*Netuma nasuta*, Bleek., Atl. Ichthyol. Silur., t. 61.

— *thalassina*, Bleek., l.c., t. 28.

*Arius thalassinus*, Günth., Cat. v, p. 139; Kner, Voy. Novara Fische, p. 310; Day, Fishes of India, p. 463, pls. 104, f. 4, and 106, f. 1; All. & MacL., Proc. Linn. Soc. N. S. Wales i, p. 348; Macleay, Aust. Cat. ii, p. 148, and Proc. Linn. Soc. N. S. Wales viii, p. 209.

*Hab.*—From the east coast of Africa through all the Indian and Malayan seas to the east coast of Australia; Port Jackson. Grows to a large size.

## SCOPELIDÆ.

## SAURUS MYOPS.

*Salmo foetens*, Bloch., t. 384, f. 2; Bl. Schn., p. 404 (*not Linn.*)

— *myops*, Forst., Descr. Anim., p. 412.

*Saurus limbatus*, Eyd. & Soul., Voy. Bonite Poiss., p. 100, t. vii, f. 3.

— *myops*, Cuv., Rég. Anim.; Cuv. & Val. xxii, p. 485; Bleek., Atl. Ichthyol. Saurida, t. 2, f. 3; Günth., Cat. v, p. 398; Day, Fishes of India, p. 504, pl. 117, f. 5; Macleay, Aust. Cat. ii, p. 153.

— *trachinus*, Schleg., Faun. Japon. Poiss., p. 231, pl. 106, f. 2.

*Hab.*—Tropical seas; Port Jackson. Grows to the length of a foot.

## SAURUS NEBULOSUS.

*Dentex nebulosus* (Solander), Cuv. & Val. xxii, p. 506.

*Saurus gracilis*, Quoy & Gaim., Voy. Uranie, p. 222.

*Saurida nebulosa*, Cuv. & Val. xxii, p. 504, t. 618; Bleek., Atl. Ichthyol. Saurida, t. 1, f. 1; Günth., Cat. v, p. 399; Kner, Voy. Novara Fische, p. 316; Day, Fishes of India, p. 505; Macleay, Aust. Cat. ii, p. 154.

*Hab.*—East African, Indian, Malayan, and Australian seas; Port Jackson. Length, up to 8 inches.

## 523 SAURUS AUSTRALIS.

*Saurida australis*, Casteln., Proc. Linn. Soc. N. S. Wales iii, p. 393.

*Hab.*—Port Jackson. Length, 14 inches.

## SAURUS TRUCULENTUS.

*Saurida truculenta*, Macleay, Aust. Cat. ii, p. 155.

*Hab.*—Port Jackson. Length, 20 inches.

## SAURUS FEROX.

*Saurida ferox*, Ramsay, Proc. Linn. Soc. N. S. Wales viii, p. 177.

*Hab.*—Port Jackson.

Count Castelnau includes *Saurus undosquamis*, Rich., in his list of Port Jackson fishes (Proc. Linn. Soc. N. S. Wales iii, p. 355), but without giving any proof of its occurrence, and as a mere catalogue name I unhesitatingly omit it from the New South Wales Fauna.

AULOPUS *PURPURISSATUS*.

Rich., Ic. Pisc., p. 6, pl. 2, f. 3 (*very bad*) ; Günth., Cat. v, p. 403 ; McCoy, Prodr. Zool. Viet. dec. vi, pls. 54, 55 ; Macleay, Aust. Cat. ii, p. 157 ; Tenison-Woods, Fisheries of N. S. Wales, p. 82, pl. 35.

*Aulopus milesii*, Cuv. & Val. xxii, p. 519, pl. 650.

*Hab.*—Coasts of Victoria and New South Wales. *Sergeant Baker* at Sydney. Attains to the length of 2 feet. One of the best food fishes of the colony. One of the characters of this genus, as given in the British Museum Catalogue, is "Pyloric appendages *few* in number"; this will have to be omitted, as our southern species have these organs in very large numbers, up to 130 in a specimen examined lately.

## CHLOROPITHALMUS NIGRIPINNIS.

Günth., Ann. Nat. Hist. 1878, (5) ii, p. 182.

*Hab.*—Twofold Bay, 120 fathoms.

## PLAGYODUS FEROX.

*Alepisaurus ferox*, Lowe, Trans. Zool. Soc. i, pl. 19, and p. 395, pl. 59 ; Cuv. & Val. xx, p. 529 ; Johnson, Ann. Nat. Hist. 1862, (3) x, p. 317.

? ——— Rich., Voy. Erebus and Terror Fishes, p. 34, pl. 22, ff. 1-4.

*Alepidosaurus ferox*, Günth., Cat. v, p. 421 ; Macleay, Aust. Cat. ii, p. 162.

*Plagyodus ferox*, Günth., Ann. Nat. Hist. 1867, (3) xix, p. 185, and Study of Fishes, p. 586, f. 270.

*Hab.*—Atlantic Ocean ; Tasmania (Richardson) ; Port Jackson (Krefft). Attains a length of 5 feet.

## CYPRINIDÆ.

## CYPRININA.

## CARASSIUS VULGARIS.

*Cyprinus carassius*, Linn., Syst. Nat. i, p. 526 ; Cuv. & Val. xvi, p. 82, pl. 459.

*Carassius vulgaris*, Nordm. in Demid. Voy. Russ. Mer. iii, p. 479 ; Günth., Cat. vii, p. 29, and Study of Fishes, p. 591 ; Houghton, Brit. Fresh-water Fishes, p. 19 ; Day, Brit. Fishes ii, p. 164, pl. 130.

*Cyprinus gibelio*, Linn. Gmel., p. 1417.

*Hab.*—Europe and Siberia ; introduced to many fresh-water lagunes and ponds of New South Wales ; Botany swamps. Length up to 10 inches. Those which I have seen from this neighbourhood belong to var. *gibelio* ; one received lately from the Nepean above Penrith is true *C. vulgaris*.

## LEUCISCINA.

## 340 TINCA VULGARIS.

*Cyprinus tinca*, Linn., Syst. Nat. i, p. 526.

*Tinca vulgaris*, Cuv., Règ. Anim.; Cuv. & Val. xvi, p. 322, pl. 484; Günth., Cat. vii, p. 265, and Study of Fishes, p. 599, f. 274; Houghton, Brit. Fresh-water Fishes, p. 49; Day, Brit. Fishes ii, p. 188, pl. 134, f. 2.

*Hab.*—Fresh waters of Europe and Asia Minor; introduced into New South Wales. *Tench*. Grows to the weight of 5 pounds. A moderate fish for the table.

## SCOMBRESOCIDÆ.

## BELONE FEROX.

Günth., Cat. vi, p. 242; Casteln., Proc. Linn. Soc. N. S. Wales ii, p. 239, and iii, p. 394; Macleay, Aust. Cat. ii, p. 176; Tenison-Woods, Fisheries of N. S. Wales, p. 83, pl. 36.

*Hab.*—New South Wales, common. *Long Tom* of the Sydney fishermen.

## BELONE KREFFTII.

Günth., Cat. vi, p. 250; Casteln., Proc. Linn. Soc. N. S. Wales iii, p. 50; Macleay, op. cit. viii, p. 209, and Aust. Cat. ii, p. 178.

*Hab.*—Rivers of Northern Queensland; Hunter River (Krefft). Length up to 2 feet.

## BELONE MACLEAYANA.

*Belone gracilis*, Macleay, Aust. Cat. ii, p. 179.

*Hab.*—Port Jackson. Length, 8 inches. I am again compelled to change Mr. Macleay's name, the same having been given previously to an Indian species by Schlegel, and to a Portuguese species by Lowe.

## SCOMBRESOX FORSTERI.

*Esox saurus*, Forst., Descr. Anim. ed. Licht., p. 143.

*Scomberesox forsteri*, Cuv. & Val. xviii, p. 481.

*Scomberesox forsteri*, Günth., Cat. vi, p. 258; Hutton, Fishes of N. Zeal., p. 53; Macleay, Aust. Cat. ii, p. 180.

*Hab.*—New Zealand; Melbourne (Castelnau); Sydney (Macleay).

## HEMIRHAMPHUS INTERMEDIUS.

Cant., Ann. Nat. Hist. 1842, ix, p. 485; Rich., Ichthyol. China, p. 264; Macleay, Aust. Cat. ii, p. 181; Tenison-Woods, Fisheries of N. S. Wales, p. 84, pl. 37 (*up. fig.*)

*Hemirhamphus melanochir*, Cuv. & Val. xix, p. 41; Castelnau, Proc. Linn. Soc. N. S. Wales iii, p. 394.

*Hab.*—Seas of China, Australia, and New Zealand; Port Jackson, abundant. *Common Garfish* of the Sydney market. Grows to 18 inches in length. An excellent fish for the table.

## HEMIRHAMPHUS REGULARIS.

Günth., Cat. vi, p. 261; Casteln., Proc. Linn. Soc. N. S. Wales iii, p. 394; Macleay, Aust. Cat. ii, p. 181; Tenison-Woods, Fisheries of N. S. Wales, p. 84, pls. 37 (*low. fig.*) and 38.

*Hab.*—Coasts of Australia; Port Jackson, common. *River Garfish*. Grows to the length of 12 inches. A good table-fish, but not equal to the preceding.

## HEMIRHAMPHUS ARGENTEUS.

Benn., Whaling Voy. ii, p. 269; Casteln., Proc. Linn. Soc. N. S. Wales iii, p. 394.

*Hemirhamphus breviceps*, Casteln., l. c. ii, p. 240.

*Hab.*—Brisbane; Sydney (rare). Length up to 5 inches.

This is perhaps the young of *Hemirhamphus intermedius*.

## 396 HEMIRHAMPHUS FAR.

*Esox far*, Forsk., Descr. Anim., No. 98.

*Hemirhamphus far*, Rüpp., N. W. Fische, p. 74; Day, Fishes of India, p. 516, pl. 120, f. 3.

— *commersonii*, Cuv. & Val. xix, p. 28; Bleek., Atl. Ichthyol. Scombres., t. 6, f. 3; Günth., Cat. vi, p. 271; All. & Macle., Proc. Linn. Soc. N. S. Wales i, p. 350; Macleay, op. cit. vii, p. 593, and Aust. Cat., p. 183.

*Hab.*—From the east coast of Africa through all the Indian and Malayan seas to the east coast of Australia; Port Jackson. Length up to 15 inches.

## HEMIRHAMPHUS AUSTRALIS.

Steind., Sitzgsber. Ak. Wiss. Wien 1866, liii, p. 471.

*Hab.*—Port Jackson.

ARRHAMPHUS <sup>V</sup>SCLEROLEPIS.

Günth., Cat. vi, p. 277; Macleay, Proc. Linn. Soc. N. S. Wales ii, p. 364, and Aust. Cat. ii, p. 184.

— *Hemirhamphus krefftii*, Steind., Sitzgsber. Ak. Wiss. Wien 1867, lvi, p. 332, t. 1.

*Hab.*—East coast of Australia; Port Jackson (Steindachner). Length up to 9 inches.

## EXOCETUS MELANOCERCUS.

Ogilby, Proc. Linn. Soc. N. S. Wales x, p. 123.

*Hab.*—Port Jackson. Length, 15·25 inches.

## ? EXOCETUS UNICOLOR.

*Exocoetus unicolor* ?, Cuv. & Val. xix, p. 97; Kner, Voy. Novara Fische, p. 325.

*Hab.*—Sydney (Kner). Length, 8 inches.

## GALAXIIDÆ.

## GALAXIAS OLIDUS.

Günth., Cat. vi, p. 209; Macleay, Aust. Cat. ii, p. 166.

*Hab.*—Rivers of New South Wales (Krefft). Length up to 4 inches.

## GALAXIAS KREFFTII.

Günth., Cat. vi, p. 211; Macleay, Aust. Cat. ii, p. 167.

*Hab.*—Rivers of New South Wales; Rope's Creek (Macleay). Length up to 6 inches.

## GALAXIAS SCRIBA.

Cuv. & Val. xviii, p. 347; Günth., Cat. vi, p. 212; Macleay, Aust. Cat. ii, p. 168.

*Hab.*—Port Jackson. Length, 3 inches.

## GALAXIAS PUNCTATUS.

Günth., Cat. vi, p. 212; Macleay, Aust. Cat. ii, p. 168.

*Hab.*—Eastern Creek. Length, 6·50 inches.

GALAXIAS <sup>V</sup>COXII.

Macleay, Proc. Linn. Soc. N. S. Wales v, p. 45.

*Hab.*—Streams on the uplands of Mount Wilson. Length, 7 inches.

## GALAXIAS PLANICEPS.

Macleay, Aust. Cat. ii, p. 169.

*Hab.*—Rankin's Lagoon, near Bathurst.

409 *GALAXIAS BONG-BONG.*

Macleay, Aust. Cat. ii, p. 169.

*Hab.*—Moss Vale and rivers at Bong-bong. Length, 3 inches.

## GALAXIAS NEBULOSUS.

*Galaxias nebulosa*, Macleay, Aust. Cat. ii, p. 170.

*Hab.*—Long Bay, near Sydney. Length, 3 inches.

## GALAXIAS FINDLAYI.

Macleay, Proc. Linn. Soc. N. S. Wales vii, p. 107.

*Hab.*—Upland ponds of Mount Kosciusko. Length, 3 inches.

## GALAXIAS SCOTTII.

Krefft, M.S. name.

*Hab.*—Ash Island, Hunter River. Length, 4·75 inches.

## SALMONIDÆ.

## SALMO FARIO.

Linn., Syst. Nat. i, p. 509; Günth., Cat. vi, p. 59; Houghton, Brit. Fresh-water Fishes ii, p. 111; Day, Brit. Fishes ii, p. 95, pls. 109, f. 3, 113, 114, and 116, f. 1.

*Hab.*—Temperate and colder parts of the northern hemisphere; introduced into New Zealand, Tasmania, Victoria, and New South Wales; streams of the National Park, 1885. The Trout. Grows to the weight of 20lbs. and over; I have seen a trout from Lough Neagh, Ireland, which weighed 28lbs. and Thompson (Nat. Hist. Ireland iv, p. 158) mentions having examined one of 36lbs. These belonged to var. *ferox*. Other forms of this most variable species have been separated as *nigripinnis*, *estuarius*, *stomachicus*, *orcadensis*, *cornubiensis*, and so on; at this rate every stream and feeder of a stream might furnish us with a so-called species.

## RETROPINNA RICHARDSONII.

*Argentina retropinna*, Rich., Voy. Erebus & Terror Fishes, p. 121, pl. 52, ff. 1-3.

*Retropinna richardsonii*, Gill, Proc. Ac. Nat. Sc. Philad. 1862, p. 14; Günth., Cat. vi, p. 171; Hector, Trans. N. Zeal. Inst. iii, p. 133, pl. 18, f. 3; Macleay, Aust. Cat. ii, p. 161.

*Richardsonia retropinna*, Kner, Voy. Novara Fische, p. 318.

*Hab.*—Fresh waters of New Zealand and the Southern parts of Australia; Rope's Creek (Macleay). Length up to 4 inches.

## CLUPEIDÆ.

## CHATOESSUS RICHARDSONII.

Casteln., Proc. Zool. Soc. Vict. ii, p. 144; Macleay, Proc. Linn. Soc. N. S. Wales iv, p. 369.

*Hab.*—Murray River and its tributaries. *Manur* and *Ka-ee-ra* of the Aborigines. Attains to the length of 1·4 inches. Of delicate flavour.

## CHATOESSUS EREBI.

? *Chatoësus come*, Rich., Voy. Erebus and Terror Fishes, p. 62, pl. 38, ff. 7-10.

*Chatoëssus erebi*, Günth., Cat. vii, p. 407; Macleay, Proc. Linn. Soc. N. S. Wales iv, p. 368; Tenison-Woods, Fisheries of N. S. Wales, p. 106.

*Hab.*—Rivers of North and West Australia; Clarence and Namoi Rivers, New South Wales. *Bony Bream*: *Sardine* at Brisbane; *Perth Herring* of Swan River, West Australia.

CLUPEA<sup>✓</sup>SAGAN.

Jenyns, Voy. Beagle Fishes, p. 134; Günth., Cat. vii, p. 443; Macleay, Proc. Linn. Soc. N. S. Wales iv, p. 371; Tenison-Woods, Fisheries of N. S. Wales, p. 86.

*Alosa melanosticta*, Cuv. & Val. xx, p. 444 (not Schleg.).

— *fimbriata*, Kner and Steind., Sitzgsber. Ak. Wiss. Wien 1867, liv, p. 386, t. 15.

*Hab.*—Pacific coasts of America; Japan; New Zealand; Tasmania; Victoria; New South Wales, abundant. *Maray* of the Port Jackson fishermen. Length, up to 8 inches. An excellent table-fish.

CLUPEA<sup>✓</sup>SUNDAYA.

Bleek., Atl. Ichthyol. Clup., p. 105, pl. 271, f. 5; Macleay, Proc. Linn. Soc. N. S. Wales iv, p. 373; Tenison-Woods, Fisheries of N. S. Wales, p. 86.

*Hab.*—Java & Celebes (Bleeker); New South Wales, abundant. *Herring* of the Sydney fishermen. Length, up to 6 inches. A well-flavored fish.

## CLUPEA HYPSELOSOMA.

*Harengula hypselosoma*, Bleek., Nat. Tydschr. Ned. Ind. viii, 1855, p. 427.

*Clupea hypselosoma*, Günth., Cat. vii, p. 431; Macleay, Proc. Linn. Soc. N. S. Wales iv, p. 375; Bleek., Atl. Ichthyol. Clup. vi, p. 104, pl. 267, f. 2.

*Hab.*—Amboyna; Port Jackson, abundant. An excellent food fish.

## CLUPEA MOLUCCENSIS.

*Harengula moluccensis*, Bleek., Nat. Tydschr. Ned. Ind. iv, p. 609.

— *kunzei*, Bleek., l. c. xii, p. 209.

*Clupea moluccensis*, Günth., Cat. vii, p. 427; Casteln., Proc. Linn. Soc. N. S. Wales iii, p. 395; Macleay, op. cit. iv, p. 376; Bleek., Atl. Ichthyol. Clup. vi, p. 107, t. 263, ff. 1, 2.

*Hab.*—From Ceylon to the Malay Archipelago; Port Jackson (Castelnau).

## CLUPEA NOVAE-HOLLANDIE.

*Meletta novae-hollandiae*, Cuv. & Val. xx, p. 376.

*Clupea novae-hollandiae*, Günth., Cat. vii, p. 431; Macleay, Proc. Linn. Soc. N. S. Wales iv, p. 378.

*Hab.*—Nepean River. *Nepean Herring*. Length, up to 8 inches. Of little value as a food fish.

## CLUPEA RICHMONDIA.

Macleay, Proc. Linn. Soc. N. S. Wales iv, p. 380.

*Hab.*—Richmond River. *Richmond Herring*. Length, under 5 inches.

ETRUMEUS<sup>✓</sup>JACKSONIENSIS.

Macleay, Proc. Linn. Soc. N. S. Wales iii, p. 36, pl. 4, f. 1, & iv, p. 382.

*Hab.*—Coast of New South Wales; Port Jackson. Also called *Maray* by the fishermen. Said to be excellent for the table.

## ELOPS SAURUS.

Linn., Syst. Nat. i, p. 518; Bloch, t. 393, f. 1; Cuv. & Val. xix, p. 365; Bleek., Atl. Ichthyol. Clup. vi, p. 84, t. 218, f. 3; Kner, Voy. Novara Fische, p. 338; Günth., Cat. vii, p. 470; Day, Fishes of India, p. 649, pl. 166, f. 1; Casteln., Proc. Linn. Soc. N. S. Wales ii, p. 241; Macleay, op. cit. iv, p. 382; Günther, Study of Fishes, p. 661, f. 301.

*Argentina machnata*, Försk., Descr. Anim., p. 68, No. 100; Linn. Gmel., p. 1395.

*Elops machnata*, Cuv. Reg. Anim.; Rüpp., N. W. Fische, pp. 80, 84; Rich., Voy. Erebus and Terror Fishes, p. 59, pl. 30, ff. 3-5, and Ichthyol. China, p. 310; Schleg., Faun. Japon. Poiss., p. 241, t. 109, f. 2.

— *capensis*, Smith, Ill. Zool. S. Africa Fishes, pl. vii.

*Hab.*—From the east coast of Africa through all the Indian and Malayan seas, to the Australian coasts; Port Jackson, scarce. Grows to 3 feet in length. The flesh is of good quality.

#### MEGALOPS CYPRINOIDES.

*Clupea cyprinoides*, Brouss., Ichthyol., t. ix.; Forst., Deser. Anim. ed. Licht., p. 296; Bl. Schn., p. 427.

*Megalops filamentosus*, Lacép. v, pp. 289, 290; Bleek., Atl. Ichthyol. Clup. vi, p. 86, t. 273.

— *cyprinoides*, Swains., Fishes ii, p. 292; Günth., Cat. vii, p. 471; Day, Fishes of India, p. 650, pl. 159, f. 3; Macleay, Proc. Linn. Soc. N. S. Wales iv, p. 383, and viii, p. 210.

— *setipinnis*, Rich., Ann. Nat. Hist. xi, p. 493, and Ichthyol. China, p. 310.

— *indicus*, Cuv. & Val. xix, p. 388, pl. 542; Kner, Voy. Novara Fische, p. 339.

— *macrophthalmus*, Bleek., l. c., p. 85, t. 273, f. 2.

— *cundinga*, Bleek., l. c., p. 87, t. 274, f. 1.

*Hab.*—From the east coast of Africa, through all the Indian and Malayan seas, to Australia and Polynesia, entering fresh water. Hawkesbury River. Grows to the length of a foot. Of excellent flavor.

#### CHANOS SALMONEUS.

*Mugil chanos*, Forst., Deser. Anim., p. 74, No. 110.

— *salmoneus*, Bl. Schn., p. 121; Forsk., Deser. Anim. ed. Licht., p. 299.

*Chanos arabicus*, Lacép. v, pp. 395, 396; Cuv. & Val. xix, p. 187.

— *salmoneus*, Cuv. & Val. xix, p. 201; Günth., Cat. vii, p. 473; Bleek., Atl. Ichthyol. Clup. vi, p. 81, t. 272, f. 4; Day, Fishes of India, p. 651, pl. 166, f. 2; Macleay, Proc. Linn. Soc. N. S. Wales iv, p. 383, vii, p. 594, and viii, p. 210; Günth., Study of Fishes, p. 662, f. 302.

— *orientalis*, Cuv. & Val. xix, p. 197; Kner., Voy. Novara Fische, p. 341.

*Hab.*—Indian and Pacific Oceans, entering fresh waters. Port Jackson (Castelnau). Grows to the length of 4 feet. An excellent fish for the table.

#### CHIROCENTRIDÆ.

##### CHIROCENTRUS DORAB.

*Clupea dorab*, Forsk., Deser. Anim., p. 72.

*Esox chirocentrus*, Lacép. v, p. 317, t. 8, f. 1.

*Chirocentrus dorab*, Rüpp., N. W. Fische, p. 81; Cuv. & Val. xix, p. 150, pl. 565; Rich., Ichthyol. China, p. 311; Bleek., Atl. Ichthyol. vi, p. 92, t. 271, f. 3; Kner, Voy. Novara Fische, p. 340; Günth., Cat. vii, p. 475; Day, Fishes of India, p. 652, pl. 166, f. 3; All. & MacL., Proc. Linn. Soc. N. S. Wales i, p. 351; Macleay, op. cit. vii, p. 594, viii, p. 210, & Aust. Cat. ii, p. 199.

— *hypsosoma*, Bleek., Atl. Ichthyol. vi, p. 93, t. 269, f. 3.

*Hab.*—From the Indian seas to Japan and Australia; Port Jackson. Grows to the length of 12 feet (Day); 3 feet (Günther). Of little value as food.

#### SYMBRANCHIIDÆ.

##### CHILOBRANCHUS RUFUS.

Macleay, Aust. Cat. ii, p. 202.

*Hab.*—Tasmania; Port Jackson, common. Length, up to 3·50 inches.

## MURÆNIDÆ.

## ANGUILLA 'REINHARDTII.'

Steind., Sitzsber. Ak. Wiss. Wien 1867, IV, p. 15; Günth., Cat. viii, p. 27; Macleay, Aust. Cat. ii, p. 203, and Proc. Linn. Soc. N. S. Wales viii, p. 210.

*Hab.*—North and east coasts of Australia; Port Jackson; Hawkesbury and Richmond Rivers. Grows to the length of 30 inches.

## ANGUILLA AUSTRALIS.

Rich., Trans. Zool. Soc. iii, p. 157, & Voy. Erebus and Terror Fishes, p. 112, pl. 45, ff. 1-5; Jenyns, Voy. Beagle Fishes, p. 142; Bleek., Atl. Ichthyol. Muræn., p. 12, t. 7, f. 1; Günth., Cat. viii, p. 36; Macleay, Aust. Cat. ii, p. 203; Tenison-Woods, Fisheries of N. S. Wales, p. 88, pl. 39.

*Hab.*—Timor; New Zealand; Auckland Islands; Tasmania; rivers of the eastern watershed and coasts of Victoria and New South Wales. The *Australian eel*. A good fish for the table.

## CONGER LABIATUS.

Casteln., Proc. Linn. Soc. N. S. Wales iii, p. 396.

*Hab.*—Port Jackson. Grows to 3 feet in length.

## CONGROMURÆNA HABENATA.

*Congrus habenatus*, Rich., Voy. Erebus and Terror Fishes, p. 109, pl. 50, ff. 1-5.

*Congromuræna habenata*, Kaup, Apodes, p. 108, f. 72; Günth., Cat. viii, p. 42; Macleay, Aust. Cat. ii, p. 206.

? *Ophisoma habenata*, Kner, Voy. Novara Fische, p. 374, t. 13, f. 2.

*Hab.*—New Zealand; Melbourne, rare; a single specimen cast up on Bondi Beach, N. S. Wales. Length, 12·70 inches.

## MURÆNESOX CINEREUS.

*Muræna cinerea*, Forsk., Deser. Anim., pp. 10 and 22.

— *bagio*, Ham. Buch., Fish. Ganges, pp. 24, 364.

*Ophisurus rostratus*, Quoy & Gaim., Voy. Freyc. Zool., p. 242, pl. 51, f. 1.

*Conger oxyrhynchus*, Eyd. & Soul., Voy. Bonite i, p. 203, pl. ix, f. 2.

*Congrus tricuspidatus*, Rich., Voy. Sulphur Fishes, p. 105, pl. 51, f. 2, Ichthyol. China, p. 312, and Voy. Erebus and Terror Fishes, p. 110.

*Conger hamo*, Schleg., Faun. Japon. Poiss., p. 262, pl. 114, f. 2; Rich., Voy. Erebus and Terror Fishes, p. 111.

*Muraenesox bagio*, Peters, Wieg. Arch. 1855, p. 270; Kaup, Apodes, p. 116, pl. xiv, f. 73; Bleek., Atl. Ichthyol. Muræn. iv, p. 21, t. 170, f. 2; Kner, Voy. Novara Fische, p. 372; Casteln. Proc. Linn. Soc. N. S. Wales ii, p. 244, and iii, p. 395.

— *cinereus*, Günth., Cat. viii, p. 46; Day, Fishes of India, p. 662, pl. 168, f. 4; Macleay, Aust. Cat. ii, p. 206.

*Hab.*—From the Red Sea through those of India to Japan and Australia; Port Jackson; Hawkesbury River. *Silver Eel* of the colonists. Grows to the length of 3 feet.

## ? MYROPHIS AUSTRALIS.

Casteln., Proc. Linn. Soc. N. S. Wales iii, p. 396.

*Hab.*—Port Jackson. Length, 34 inches.

## MURÆNICHTHYS AUSTRALIS.

Macleay, Aust. Cat. ii, p. 208.

*Hab.*—Lane Cove, Port Jackson. Length, 10 inches.

## 436 ? MURENICHTHYS GYMNOTUS.

*Murænichthys gymnotus*, Bleek, Act. Soc. Sc. Indo.-Nederl. ii, Amboina, viii, p. 90, and Atl. Ichthiol. Muræn., p. 33, pl. 6, f. 3; Günth., Cat. viii, p. 53, and ? Voy. Challenger Shore Fishes, p. 30.

*Hab.*—Amboina; Port Jackson (Günther). Length of type, 6 inches.

## OPHICHTHYS SERPENS.

*Muræna serpens*, Linn., Syst. Nat. i, p. 425.

*Ophisurus serpens*, Lacép. ii, p. 198; Schleg., Faun. Japon. Poiss., p. 264, pl. 115, f. 1; Rich., Voy. Erebus and Terror Fishes, p. 106; Kaup., Apodes, p. 7.

*Leptorhynchus capensis*, Smith, Ill. Zool. S. Afr. Pisc., pl. 6.

*Ophichthys serpens*, Günth., Cat. viii, p. 65; Macleay, Aust. Cat. ii, p. 209.

*Ophisurus novæ-zealandiæ*, Hector, Trans. N. Zeal. Inst. 1870, ii, p. 34, pl. 3.

*Hab.*—Eastern Atlantic; Mediterranean; Japan; Australia; Lane Cove, Port Jackson (Macleay).

## MURENA UNDULATA.

*Murænophis undulata*, Lacép. v., pp. 629, 644.

*Muræna cinerascens*, Rüpp., Atl. Fische, p. 120; Günth., Cat. viii, p. 123.

— *cancellata*, Rich., Voy. Erebus and Terror Fishes, p. 87, pl. 46, ff. 1-5.

— *valenciennii*, Eyd. & Soul., Voy. Bonite Poiss., p. 207, t. viii, f. 1.

*Gymnothorax cancellatus*, Bleek., Atl. Ichthiol. Muræn. iv, p. 93, tt. 176, f. 3, 177, f. 2, and 183, f. 1; Kner., Voy. Novara Fische, p. 384.

*Muræna undulata*, Günth., Cat. viii, p. 110; Day, Fishes of India, p. 671, pl. 171, f. 5 (*young*), and 173, f. 2 (*adult*); Macleay, Aust. Cat. ii, p. 213.

*Hab.*—Indian and Pacific Oceans; Port Jackson.

## MURENA AFRA.

*Gymnothorax afer*, Bloch, t. 417.

*Muræna lineopinnis* & *prasina*, Rich., Voy. Erebus and Terror Fishes, pp. 89, 93.

*Gymnothorax boschi* & *monochrous*, Bleek, Atl. Ichthiol. Muræn. iv, pp. 105, 106, tt. 190, f. 3, and 191, f. 2.

— *jacksoniensis*, Bleek, Verst. en Medel. Ak. Wet. Amst. 1863, xv, p. 450.

*Muræna afra*, Günth., Cat. viii, p. 123; Day, Fishes of India, p. 671; Steind. Denk. Ak. Wien xliiv, p. 49; Macleay, Aust. Cat., p. 217.

*Hab.*—Tropical parts of the Atlantic and Indian Oceans; Australian coasts; Port Jackson, common. *Green Eel* of the Sydney Market. Grows to 30 inches long.

## MURENA PICTA.

Ahl, de Mur. et Ophich. in Thunb. Diss. iii; p. 6, t. 2, f. 2; Günth., Fish. Zanz., p. 126, & Cat. viii, p. 116, & Study of Fishes, f. 306; Day, Fishes of India, p. 672, pl. 172, f. 4; Macleay, Aust. Cat. ii, p. 215.

*Gymnothorax pictus*, Bl. Schn., p. 529; Bleek., Atl. Ichthiol. Muræn. iv, p. 87, tt. 170, ff. 3, 4, 172, f. 3, 173, f. 3 & 189, f. 3; Kner., Voy. Novara Fische, p. 384.

*Muræna variegata*, Quoy & Gaim., Voy. Uranie Zool., p. 246, t. lii, f. 1.

— *siderea*, Rich., Voy. Erebus and Terror Fishes, p. 84, pl. 48, ff. 1-5; Casteln., Proc. Linn. Soc. N. S. Wales iii, p. 396; Macleay, op. cit. vii, p. 594.

*Hab.*—Indian and Pacific Oceans; Australian coasts; Port Jackson. Grows to 30 inches in length.

## 441 MURÆNA NEBULOSA.

Ahl, de Mur. et. Ophichth., p. 5, t. 1, f. 2; Günth., Cat. viii, p. 130; Day, Fishes of India, p. 673, pl. 172, f. 2; Macleay, Aust. Cat. ii, p. 218.

*Echidna variegata*, Forst., Deser. Anim. ed Licht., p. 181; Bleek., Atl. Ichthyol. Muræn. iv, p. 80, t. 168, f. 2. *Muræna ophis*, Rüpp., Atl. Fische, p. 116, t. 29, f. 2; Rich., Voy. Erebus and Terror Fishes, p. 93. — *variegata*, Rich., l.c., p. 94, pl. 47, ff. 11-16.

*Hab.*—Indian and Pacific Oceans; Torres Straits (Macleay); Port Jackson (Krefft). Attains to a length of 5 feet.

## LOPHOBRANCHII.

## SYNGNATHIDÆ.

## SYNGNATHINA.

## SYNGNATHUS MARGARITIFER.

Peters, Monatsber. Ak. Wiss. Berlin 1868, p. 457; Günth., Cat. viii, p. 171; Macleay, Aust. Cat. ii, p. 225.

*Hab.*—Port Jackson.

## SYNGNATHUS TIGRIS.

Casteln., Proc. Linn. Soc. N. S. Wales iii, p. 397.

*Hab.*—Port Jackson. Length, 12 inches.

## SYNGNATHUS CINCTUS.

Ramsay, Proc. Linn. Soc. N. S. Wales vii, p. 111.

*Hab.*—Port Jackson.

## SYNGNATHUS SUPERCILIARIS.

Günth., Voy. Challenger Shore Fishes, p. 30; Macleay, Aust. Cat. App., p. 60.

*Hab.*—Port Jackson. Length, 6·75 inches.

## NANNOCAMPUS RUBER.

Ramsay and Ogilby, Proc. Linn. Soc. N. S. Wales x, (*in press.*)

*Hab.*—Port Jackson.

## UROCAMPUS CARINIROSTRIS.

Casteln., Proc. Zool. Soc. Vict. 1872, i, p. 200; Macleay, Aust. Cat. ii, p. 230.

*Urocampus caelorhynchus*, Günth., Fische d. Sudsee 1873, ii, p. 103, and Voy. Challenger Shore Fishes, p. 30.

*Hab.*—Port Phillip (Castelnau); Port Jackson (Günther). Length, 3·50 inches.

## STIGMATOPHORA ARGUS.

*Syngnathus argus*, Rich., Proc. Zool. Soc. 1840, p. 29, and Trans. Zool. Soc. iii, p. 183, pl. 7, f. 2.

*Stigmatophora argus*, Kaup, Lophobr., p. 53; Günth., Cat. viii, p. 189; Macleay, Aust. Cat. ii, p. 233.

*Hab.*—New Guinea; Tasmania; Port Jackson, common. Length, up to 7 inches.

## STIGMATOPHORA NIGRA.

Kaup, Lophobr., p. 53; Günth., Cat. viii, p. 190; Macleay, Aust. Cat. ii, p. 233.

*Hab.*—Port Phillip; Port Jackson. Length, up to 5 inches.

## HIPPOCAMPINA.

## 450 SOLENOGNATHUS SPINOSISSIMUS.

Günth., Cat. viii, p. 195; Macleay, Aust. Cat. ii, p. 237.

*Hab.*—Tasmania; Port Jackson (Aust. Mus.) Length 15 inches.

## SOLENOGNATHUS FASCIATUS.

Günth., Voy. Challenger Shore Fishes, p. 30, pl. 14, f. B; Macleay, Aust. Cat. App., p. 61.

*Hab.*—Twofold Bay, 120 fathoms. Length 12 inches.

## PHYLLOPTERYX FOLIATUS.

*Syngnathus foliatus*, Shaw, Gen. Zool. v, p. 456, pl. 180.

*Phyllopteryx foliatus*, Kaup, Lophobr., p. 21; Günth., Proc. Zool. Soc. 1865, p. 327, pl. 14, and Cat. viii, p. 196; M'Coy, Prodr. Zool. Vict. dec. vii, pl. 65, f. 1; Macleay, Aust. Cat. ii, p. 237.

*Hab.*—Tasmania; South coast of Australia; Port Jackson. Length up to 14 inches.

## HIPPOCAMPUS NOVÆ-HOLLANDIE.

Steind., Sitzgsber. Ak. Wiss. Wien 1866, liii, p. 474, t. 1, f. 2; Günth., Cat. viii, p. 201; Macleay, Aust. Cat. ii, p. 241.

*Hab.*—South coast of Australia; Port Jackson, common. *Long-snouted Sea-horse.* Length up to 4·50 inches.

## HIPPOCAMPUS BREVICEPS.

Peters, Monatsber. Ak. Wiss. Berlin 1869, p. 710; Günth., Cat. viii, p. 200; Macleay, Aust. Cat. ii, p. 241.

*Hab.*—Tasmania; South coast of Australia; Port Jackson. *Short-snouted Sea-horse.* Length up to 3 inches.

## PLECTOGNATHI.

## SCLERODERMI.

## BALISTINA.

## BALISTES MACULATUS.

Linnaeus, Gmel. i, p. 1468; Bleek., Atl. Ichthyol. v, p. 122, t. 218, f. 4; Kner, Voy. Novara Fische, p. 401; Günth., Cat. viii, p. 213; Day, Fishes of India, p. 687, pl. 176, f. 3, & Brit. Fishes ii, p. 268, pl. 146.

*Balistes ocellatus*, Gray & Hardw., Ill. Ind. Zool.; Bleek., Atl. Ichthyol. v, p. 121, t. 218, f. 2.

*Hab.*—Tropical and sub-tropical regions of the Atlantic and Indian Oceans, extending into the Pacific; Sydney, (Kner). *Spotted Filefish.* Grows to the length of 16 inches.

## BALISTES VIDUA.

Richardson, Voy. Sulphur Fishes, p. 128, pl. 59, ff. 9, 10; Günth., Cat. viii, p. 216.

*Melichthys vidua*, Bleek., Atl. Ichthyol. v, p. 109, t. 217, f. 2.

*Hab.*—Indian Archipelago and Pacific; Port Jackson (Aust. Mus.) Mr. Ramsay thinks that there are grave doubts as to the authenticity of the locality assigned to this specimen, as it is said to have been presented by Mr. J. Maegillivray, all of whose fishes came from the South Sea Islands.

Quoy & Gaimard (Voy. Uranie Poiss., p. 209) describe a *Balistes jacksonianus* from Sydney, but the species has not been recognized since; nevertheless Count Castelnau includes it in his catalogue of Port Jackson fishes without any comment (Proc. Linn. Soc. N. S. Wales iii, p. 356).

## 156 MONACANTHUS HIPPOCREPIS.

*Balistes hippocrepis*, Quoy & Gaim., Voy. Uranie Poiss., p. 212.

*Aleuterius variabilis*, Rich., Voy. Erebus & Terror Fishes, p. 67, pl. 53, f. 1—7.

*Monacanthus hippocrepis*, Holl., Ann. Sc. Nat. 1854, ii, p. 338; Steind., Sitzsber. Ak. Wiss. Wien 1868, lvii, p. 1002; Günth. Cat. viii, p. 246; Casteln., Proc. Linn. Soc. N. S. Wales iii, p. 399.

*Hab.*—South Australia; New South Wales coast, common. Length up to 17 inches.

## MONACANTHUS CONVEXIROSTRIS.

Günth., Cat. viii, p. 218; Macleay, Aust. Cat. ii, p. 248.

*Hab.*—New Zealand; Tasmania; Port Jackson. Length 10 inches.

## MONACANTHUS TRACHYLEPIS.

Günth., Cat. viii, p. 248; Macleay, Aust. Cat. ii, p. 249; Klunz., S.B. Ak. Wien lxxx, Abth. i, p. 422.

*Hab.*—Broken Bay; Port Jackson. Length 14 inches.

## MONACANTHUS GUENTHERI.

Macleay, Aust. Cat. ii, p. 250.

*Monacanthus peronii*, Günth., Cat. viii, p. 249.

*Hab.*—Tasmania; South coast of Australia; Port Jackson. Length 10 inches.

## MONACANTHUS SPILOMELANURUS.

*Balistes spilomelanurus*, Quoy & Gaim., Voy. Uranie Poiss., p. 217.

*Aleuterius paragaudatus*, Rich., Voy. Erebus & Terror Fishes, p. 66, pl. 39, ff. 1—4; Holl., Ann. Sc. Nat. 1854, ii, p. 357.

*Monacanthus spilomelanurus*, Günth., Cat. viii, p. 250; Macleay, Aust. Cat. ii, p. 251.

*Hab.*—South and west coasts of Australia; Tasmania; New South Wales. Length 8 inches.

## MONACANTHUS MACULOSUS.

*Aleuterius maculosus*, Rich., Proc. Zool. Soc. 1840, and Trans. Zool. Soc. iii, p. 170, and Voy. Erebus & Terror Fishes, p. 67, pl. 39, ff. 5—7; Hollard, Ann. Sc. Nat. 1854, ii, p. 359.

*Monacanthus maculosus*, Macleay, Aust. Cat. ii, p. 252.

*Hab.*—Tasmania; New South Wales; Port Jackson (Macleay). Length 5 inches.

## MONACANTHUS CASTELNAUI.

Macleay, Aust. Cat. ii, p. 252.

*Monacanthus peronii*, Casteln., Proc. Linn. Soc. N. S. Wales iii, p. 398.

*Hab.*—Port Jackson.

## MONACANTHUS FREYCINETI.

*Balistes freycineti*, Cuv. in Quoy & Gaim., Voy. Uranie Poiss., p. 213.

*Monacanthus freycineti*, Holl., Ann. Sc. Nat. 1854, ii, p. 336, pl. 12, f. 3.

*Hab.*—New South Wales (Macleay).

## MONACANTHUS MOSAICUS.

Ramsay and Ogilby, Proc. Linn. Soc. N. S. Wales xi, (*in press*).

*Hab.*—Port Jackson. Largest specimen 4½ inches.

## MONACANTHUS PRASINUS.

Casteln., Proc. Zool. Soc. Vict. i, p. 205, & Proc. Linn. Soc. N. S. Wales iii, p. 400; Macleay, Aust. Cat. ii, p. 254.

*Hab.*—Port Phillip; Port Jackson. Length 2·50 inches.

466 MONACANTHUS MARGARITIFER.

Casteln., Proc. Linn. Soc. N. S. Wales ii, p. 80; Macleay, Aust. Cat. ii, p. 256.

*Hab.*—West and south coasts of Australia; Port Jackson. Length 6 inches.

MONACANTHUS CHINENSIS.

*Balistes chinensis*, Bloch, ii, p. 29, pl. 52, f. 1.

*Monacanthus chinensis*, Cuv., Règ. Anim.; Bleek., Atl. Ichthyol. v, p. 125, pl. 222, f. 2; Günth., Cat. viii, p. 236; Kner, Voy. Novara Fische, p. 395; Steind., Sitzgsber. Ak. Wiss. Wien 1866, liii, p. 476; Macleay, Aust. Cat. ii, p. 358.

— *geographicus*, Cuv., Règ. Anim.; Casteln., Res. Fishes Aust., p. 50.

*Hab.*—From China to the north coast of Australia; Sydney, (Kner). Length 9 inches.

MONACANTHUS MEGALURUS.

Rich., Ic. Pisc., p. 5, pl. 1, f. 3; Günth., Cat. viii, p. 237; Casteln., Proc. Linn. Soc. N. S. Wales iii, p. 398; Macleay, op. cit. vii, p. 596, and Aust. Cat. ii, p. 259.

*Monacanthus chinensis*, Rich., Voy. Erebus and Terror Fishes, p. 64, pl. 40, ff. 3, 4; Hollard, Ann. Sc. Nat. 1854, ii, p. 346.

*Hab.*—Australian seas; Port Jackson, abundant. Length, 12 inches.

MONACANTHUS TOMENTOSUS.

*Balistes tomentosus*, Linn., Syst. Nat. i, p. 405.

*Monacanthus tomentosus*, Cuv., Règ. Anim.; Bleek., Atl. Ichthyol. v, p. 127, tt. 220, f. 1, and 229, f. 1; Günth., Cat. viii, p. 238; Macleay, Aust. Cat. ii, p. 259.

*Hab.*—Endeavour River (Macleay); Port Jackson (Krefft). Length, 5 inches.

MONACANTHUS SULCATUS.

Holl., Ann. Sc. Nat. 1854, ii, p. 363, pl. 14, f. 3 (*not good*); Günth., Cat. viii, p. 239; Macleay, Aust. Cat. ii, p. 260.

*Monacanthus isogramma*, Bleek., Atl. Ichthyol. v, p. 128, pl. 222, f. 1.

*Hab.*—From the Chinese to the Australian seas; east coast (Krefft). Length, 3·50 inches.

MONACANTHUS GRANULATUS.

*Balistes granulatus*, White, Voy. N. S. Wales, p. 295, pl. (p. 254), f. 2.

*Monacanthus granulatus*, Rich., Voy. Erebus and Terror Fishes, p. 63, pl. 40, ff. 1, 2 (*not good*); Steind., Sitzgsber. Ak. Wiss. Wien 1866, liii, p. 476; Casteln., Proc. Linn. Soc. N. S. Wales iii, p. 398; Macleay, Aust. Cat. ii, p. 260.

— *granulosus*, Günth., Cat. viii, p. 243.

*Hab.*—Coast of New South Wales; Port Jackson, common. Length, 9 inches.

MONACANTHUS RUDIS.

Rich., Trans. Zool. Soc. iii, p. 166, and Voy. Erebus and Terror Fishes, p. 65, pl. 40, ff. 7, 8; Günth., Cat. viii, p. 244; Casteln., Proc. Linn. Soc. N. S. Wales iii, p. 399; Macleay, Aust. Cat. ii, p. 261.

*Hab.*—Tasmania; Port Jackson. Length, 10 inches.

473 *MONACANTHUS AYRAUDI.*

*Balistes ayraudi*, Quoy & Gaim., Voy. Uranie Poiss., p. 216, pl. 47, f. 2.

*Aluterus velutinus*, Jenyns, Voy. Beagle Fishes, p. 157.

*Monacanthus vittatus* (Solander), Rich., Voy. Erebus and Terror Fishes, p. 66; Steind., Sitzsber. Ak. Wiss. Wien 1866, liii, p. 476, and 1867, lvi, p. 335.

— *frauenfeldii*, Kner, Voy. Novara Fische, p. 397.

— *ayraudi*, Günth., Cat. viii, p. 244; Casteln., Proc. Linn. Soc. N. S. Wales iii, p. 397; Macleay, Aust. Cat. ii, p. 262; Tenison-Woods, Fisheries of N. S. Wales, p. 89, pl. 40.

*Hab.*—Australian coasts; Port Jackson, common. The *Leather-jacket*. Attains the length of 18 inches. An excellent food-fish, though but little eaten through prejudice against its looks.

## MONACANTHUS PENICILLIGERUS.

Cuv., Règ. Anim.; Holl., Ann. Sc. Nat. 1854, ii, p. 350, pl. 13, f. 2; Günth., Cat. viii, p. 245; Macleay, Aust. Cat. ii, p. 263.

*Monacanthus spinosissimus*, Quoy & Gaim., Voy. Uranie Poiss., p. 211, pl. 45, ff. 3-8.

*Chætodermis penicilligerus*, Bleek., Atl. Ichthyol. v, p. 129, pl. 221, f. 3.

*Hab.*—Malay Archipelago; north and east coasts of Australia; Port Jackson (Krefft). Length, 10 inches.

## MONACANTHUS TROSSULUS.

*Aleuterius trossulus*, Rich., Voy. Erebus and Terror Fishes, p. 68, pl. 40, ff. 5, 6; Holl., Ann. Sc. Nat. 1855, iv, p. 6, pl. 1, f. 1.

*Monacanthus trossulus*, Günth., Cat. viii, p. 234; Macleay, Aust. Cat. ii, p. 264.

*Hab.*—West Australia; Victoria; Port Jackson, common. Length, 3 inches.

## MONACANTHUS OCULATUS.

Günth., Cat. viii, p. 235; Macleay, Aust. Cat. ii, p. 265.

*Hab.*—South Australia; Port Jackson. Length, 1.50 in.

## MONACANTHUS MACULICAUDA.

*Monacanthus macrurus*, Macleay, Aust. Cat. ii, p. 266.

*Hab.*—Port Jackson. Length, 7 inches. The name *macrurus* is preoccupied by Bleeker for a *Monacanthus* from the Malay Archipelago, and I have therefore substituted a name which has reference to the distinctive tail-markings of the species.

## OSTRACIONTINA.

## OSTRACION CONCATENATUS.

Bloch, t. 131; Holl., Ann. Sc. Nat. 1857, vii, p. 155; Günth., Cat. viii, p. 259; Macleay, Aust. Cat. ii, p. 268.

*Ostracion bicuspis*, Smith, Ill. Zool. S. Afr. Pisc., pl. 18.

*Hab.*—Cape seas; Chinese seas; Port Jackson, common. Length, 10 inches.

## OSTRACION DIAPHANUS.

Bloch Schn., p. 501; Holl., Ann. Sc. Nat. 1857, vii, p. 157; Günth., Cat. viii, p. 261; Macleay, Aust. Cat. ii, p. 269.

*Ostracion brevicornis*, Schleg., Faun. Japon. Poiss., p. 297, t. 130, f. 3.

*Acanthostracion cornutus*, Bleek., Atl. Ichthyol. Ostrac., p. 33, tt. 2, f. 2, and 4, f. 3.

*Hab.*—From the Cape seas to Japan and Australia; Port Jackson. Length, 8.50 in.

## 480 OSTRACION CORNUTUS.

Linn. Syst. Nat. i, p. 409; Bloch, t. 133; Schleg., Faun. Japon. Poiss., p. 299, t. 131, f. 4; Bleek., Atl. Ichthyol. v, p. 38, t. 202, f. 2 (*young*), and t. 204, f. 3 (*adult*); Holl., Ann. Sc. Nat. 1857, vii, p. 158; Günth., Cat. viii, p. 265; Day, Fishes of India, p. 697, pl. 176, f. 4; Macleay, Aust. Cat. ii, p. 270.

*Ostracion arcus*, Bl. Schn., p. 502; Bleek., Atl. Ichthyol. v, p. 35, t. 202, f. 3 (*adult*) and t. 204, f. 4 (*young*).

*Hab.*—Indian Ocean and Archipelago to Micronesia; north and east coasts of Australia; Port Jackson. Length 14 inches.

## OSTRACION LENTICULARIS.

Rich., Proc. Zool. Soc. 1841, p. 21, and Trans. Zool. Soc. iii, p. 158; Casteln., Proc. Linn. Soc. N. S. Wales iii, p. 400; Macleay, Aust. Cat. ii, p. 271.

*Aracana lenticularis*, Günth., Cat. viii, p. 268.

*Hab.*—South coast of Australia; Port Jackson, common. Length, 12 inches.

## GYMNODONTES.

## TETRODONTINA.

## TETRODON LÉVIGATUS.

Linn., Syst. Nat. i, p. 411; Günth., Cat. viii, p. 274; Macleay, Aust. Cat. ii, p. 272, and Proc. Linn. Soc. N. S. Wales viii, p. 211.

? *Tetronodon inermis*, Schleg., Faun. Japon. Poiss., p. 278, pl. 122, f. 2.

*Hab.*—Atlantic coasts of Tropical America; Japan; Australia; Port Jackson. Length to 18 inches.

## TETRODON SCELERATUS.

(Forst.) Linn. Gmel. i, p. 1444; Günth., Cat. viii, p. 276; Day, Fishes of India, p. 701; All. & MacL., Proc. Linn. Soc. N. S. Wales i, p. 357; Macleay, op. cit. viii, p. 280, and Aust. Cat. ii, p. 273.

*Tetronodon argenteus*, Lacép., Ann. Mus. d'Hist. Nat. 1804, iv, p. 211, t. 58, f. 2; Sebleg., Faun. Japon. Poiss., p. 275, t. 121, f. 2; Bleek., Atl. Ichthyol. v, p. 64, t. 209, f. 1.

*Tetraodon bicolor*, Brev., Not. Japan. Fish., p. 283.

*Hab.*—East coast of Africa to Japan and Polynesia; S. Australia; Port Jackson (Aust. Mus.) Length up to 30 inches.

## TETRODON HYPSELOGENION.

*Tetraodon honckenii*, Rüpp., Atl. Fische, p. 65, t. 17, f. 2 (*not Bloch*).

— *hypselogenion*, Bleek., Atl. Ichthyol. v, p. 61, t. 213, f. 5; Günth., Cat. viii, p. 277; Day, Fishes of India, p. 702, pl. 183, f. 5; Macleay, Aust. Cat. ii, p. 273.

*Hab.*—From the east coast of Africa to the Malay Archipelago and Australia; Fiji Islands; Port Jackson, common. Length 6 inches.

## TETRODON HAMILTONII.

Rich., Voy. Erebus & Terror Fishes, p. 63, pl. 39, ff. 10, 11; Günth., Cat. viii, p. 280; Kner., Voy. Novara Fische, p. 409; Macleay, Aust. Cat. ii, p. 274; Tenison-Woods, Fisheries of N. S. Wales, p. 90.

*Hab.*—Port Jackson. *Toad* of Sydney Fishermen. Length 5·50 inches.

## TETRODON RICHEI.

Freminv., Nouv. Bull. Philom. ii, p. 250, pl. 4, f. 2; Bleek., Atl. Ichthyol. Gymnod., p. 61, pl. 9, f. 3; Günth., Cat. viii, p. 285; Kner, Voy. Novara Fische, p. 407; Macleay, Aust. Cat. ii, p. 275.

*Hab.*—New Zealand; Tasmania; South Australia; Sydney (Kner). Length, 11 inches.

## 77 TETRODON IMMACULATUS.

Bl. Schn., p. 507; Günth., Cat. viii, p. 291; Day, Fishes of India, p. 703, pl. 183, f. 4.

*Crayracion immaculatus*, Bleek., Atl. Ichthyol. Gymnod., p. 75, t. 7, f. 1.

*Tetrodon virgatus*, Rich., Voy. Erebus & Terror Fishes, p. 62, pl. 39, ff. 8, 9, and Voy. Herald Zool. p. 163, pl. 28, ff. 6-8; All. & MacL., Proc. Linn. Soc. N. S. Wales i, p. 356; Macleay, Aust. Cat. ii, p. 275.

*Hab.*—From the Red Sea to Australia and Polynesia; Port Jackson. Length 12 inches.

## TETRODON HISPIDUS.

Lacép. i, p. 487, t. 24, f. 2; Rich., Voy. Samarang Fishes, p. 17, pl. 9, ff. 3, 4; Günth., Cat. viii, p. 297; Day, Fishes of India, p. 706, pl. 183, f. 2; Macleay, Aust. Cat. ii, p. 277.

*Tetrodon laterna*, Rich., Voy. Sulphur Zool., p. 124, pl. 61, f. 2, and Ichthyol. China, p. 199; Günth., Fish. Zanz., p. 131.

*Crayracion implutus*, Bleek., Atl. Ichthyol. Gymnod., p. 71.

— *laterna*, Bleek., l.c., t. 1, f. 3.

*Hab.*—From the Red Sea through the Indian and Malayan Seas to Australia; Port Jackson. Length 20 inches.

## TETRODON FIRMAMENTUM.

Schleg., Faun. Japon. Poiss., p. 280, pl. 126, f. 2; Günth., Cat. viii, p. 299; Macleay, Aust. Cat. ii, p. 277.

*Hab.*—Japan; Port Jackson (Macleay). Length 12 inches.

## TETRODON STELLATUS.

Bl. Schn., p. 503; Günth., Cat. viii, p. 294.

*Tetrodon lineatus*, Schleg., Faun. Japon. Poiss., p. 287, pl. 125, f. 2; Kner., Voy. Novara Fische, p. 409; Macleay, Aust. Cat. ii, p. 278.

*Crayracion stellatus*, Bleek., Atl. Ichthyol. Gymnod., p. 73, t. 5, f. 2.

— *lineatus*, Bleek., l. c., p. 70, pls. 2, f. 1, and 8, f. 1.

— *astrotænia*, Bleek., l. c., p. 69, pl. 10, f. 2.

*Hab.*—Indian and Pacific Oceans; Port Jackson. Length, 2 feet.

## TETRODON ERYTHROTÆNIA.

Bleek., Nat. Tyds. Ned. Ind. v, p. 174; Günth., Cat. viii, p. 298; Kner, Voy. Novara Fische, p. 408.

*Crayracion erythrotænia*, Bleek., Atl. Ichthyol. Gymnod., p. 68, pl. 10, f. 4.

*Hab.*—Rivers of Celebes and Amboina; Sydney (Kner).

## TETRODON AMABILIS.

Casteln., Proc. Linn. Soc. N. S. Wales iii, p. 401.

*Hab.*—Port Jackson. Length, 4'50 inches.

## DIODON HYSTRIX.

Linn., Syst. Nat. i, p. 413; Günth., Cat. viii, p. 306; Day, Fishes of India, p. 708, pl. 179, f. 4; Macleay, Aust. Cat. ii, p. 279, and Proc. Linn. Soc. N. S. Wales viii, p. 280.

*Hab.*—Tropical seas; Port Jackson (Castelnau). Length to 28 inches.

## 494 DIODON MACULATUS.

*Diodon novem-maculatus*, Cuv., Mem. Mus. Hist. Nat. iv, p. 136; Casteln., Proc. Linn. Soc. N. S. Wales iii, p. 401.

— *sex-maculatus*, Cuv., l. c., p. 136.

— *multi-maculatus*, Cuv., l. c., p. 136.

— *quadri-maculatus*, Cuv., l. c., p. 137.

*Paradiodon novem-maculatus*, Bleek., Atl. Ichthyol. Gymnod, p. 57, pl. 2, f. 3.

— *quadri-maculatus*, Bleek., l. c., p. 58, pl. 8, f. 2.

*Diodon maculatus*, Günth., Cat. viii, p. 307.

*Atopomycterus bocagei*, Steind., Sitzsber. Ak. Wiss. Wien 1866, liii, p. 477, pl. 6, f. 3.

*Hab.*—Tropical seas; Port Jackson (Castelnau). Length, 1 foot.

## DICOTYLICHTHYS PUNCTULATUS.

Kaup, Wieg. Arch. 1855, p. 230; Günth., Cat. viii, p. 315; Macleay, Aust. Cat. ii, p. 282.

*Hab.*—Cape seas; Australia; coast of New South Wales, common. *Porcupine-fish.* Length, 12 inches.

## MOLINA.

## ORTHAGORISCUS MOLA.

*Tetrondon mola*, Linn., Syst. Nat. i, p. 412.

*Orthagoriscus mola*, Bl. Schn., p. 510; Schleg., Faun. Japon. Poiss., p. 288, t. 127; Günth., Cat. viii, p. 317; Day, Brit. Fishes ii, p. 272, pl. 148.

*Ostracion boops*, Rich., Voy. Erebus and Terror Fishes, p. 52, pl. 30, ff. 18–21; Günth., Cat. viii, p. 268 (young).

*Orthagoriscus* (on the young of), Lütken, Ann. Nat. Hist. 1871, (4) viii, p. 320.

*Hab.*—Temperate and tropical seas; Port Jackson; Port Stephens. *Sun-fish.* Length, 10 feet; height, 14 feet.

## LEPTOCARDII.

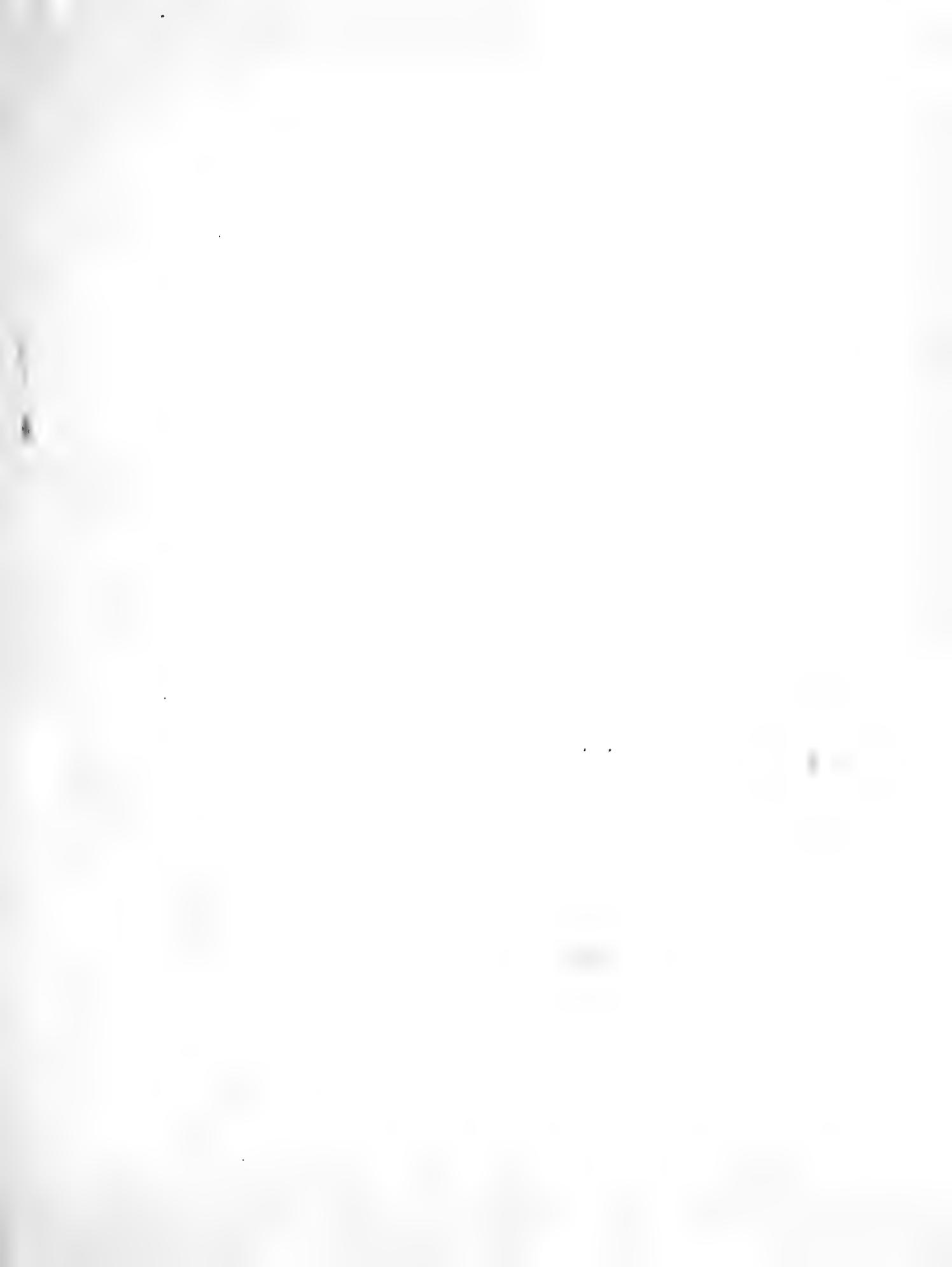
## CIRROSTOMI.

## 497 BRANCHIOSTOMA BASSANUM.

Günth., Voy. Alert Zool., p. 33.

*Hab.*—Bass's Straits; Port Jackson (Aust. Mus.)

















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